

PRODUCTS CATALOG

for Global Market / ver.4

Contec Global Network

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Improving Lives Around the World Through Contec Technologies

Contec established its expertise in highly reliable technology with electronic devices for factory automation. Leveraging this knowledge and proficiency, we have expanded into environment & energy, healthcare, and digital signage industries. We strive to improve your daily life through creative technologies and products.



Our Management Philosophy

Contribute to society
with creative technology and products

Corporate Slogan

Technology for a better life

Product Lineup

Edge Computing

Embedded Computers

- Fanless Embedded Computers
- Embedded Computers
- Industrial Motherboards

Industrial Computers

- Automation Computers
- Custom Computers

All-in-One Computers

- Panel Mount Computers



M2M / IoT

- CONPROSYS
- Remote I/O
- Wireless I/O
- Data Acquisition
- Communication
- Industrial LAN and Wireless






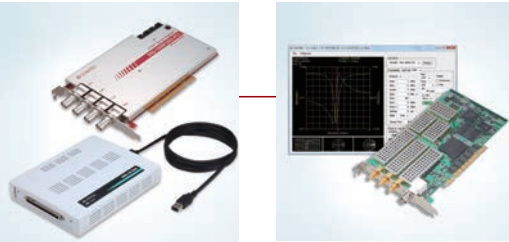
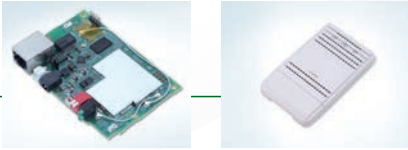
Solutions and Services

- Integration Support Services



PRODUCT CATALOG
for Global Market Ver.4

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Edge Computing

Proprietary Development Technologies Designed for a Wide Spectrum of Industries

Contec designs, develops and manufactures highly reliable, long-life and rugged industrial computers. Leveraging our expertise in the Factory Automation (FA) industry has allowed us to expand our business and quality product offerings to the growing Information and Communication Technology fields, including digital signage, healthcare, and energy.



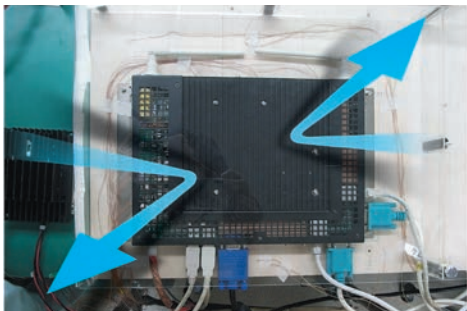
CONTEC Craftsmanship

Contec's comprehensive quality assurance framework defines specific quality requirements to deliver unsurpassable reliability without sacrificing performance or usability. For example, our products must pass more than 500 checkpoints, developed over 30 years product development experience. At Contec, quality is the synonymous with reliability. This means much more to us than simply catalog specs or performance figures. We know that for our industrial customers, reliability is the single most important factor when choosing their technology.

True Performance Indicator: 0 to 50 °C Guaranteed

Pitfall of "Operating Temperature" Indication

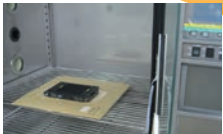
Operating temperature is one of the product performance indicators. Did you know that there are no uniform testing standards for industrial technology? Each manufacturer establishes its own performance test procedures and standards. You cannot see actual product performance differences by just checking the value range of the performance indication in basic specifications. In Contec's standard, indicated values are those measured in no-wind condition, which is a very severe environmental condition. At Contec, we believe that performance standards are insignificant unless they are rigorously tested in the most extreme industrial conditions.



Performance test with ventilation from the outside minimized with an acrylic board

Operating temperature range between 0 to 50 °C is achieved

This performance indication is equivalent to



In thermostat bath test with ventilation



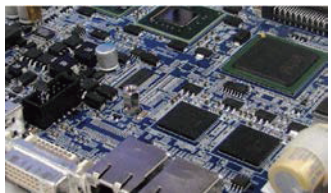
In simple surface temperature measurement

0 to 60 °C

0 to 65 °C











Quality Begins with Parts Selection

An industrial computer is composed of many electrical components, such as a CPU. Proper selection of high quality components is a decisive factor for the reliability of the final product. Parts must be meticulously selected based a deep understanding of how the product will be used and the conditions under which it must perform. When it comes to the quality and reliability of industrial box computers, we are meticulous in our attention to detail at every stage of part selection:









- CPU and chipsets for embedded devices
- High performance battery with 10-year life cycle
- Highly reliable capacitors for each unit

Embedded Computers BX Series



Power Saving		CPU Spec		High Speed					
NVIDIA Jetson		Intel Celeron N / Atom		Intel Celeron	Intel Core i3	Intel Core i5	Intel Core i7 / Xeon		
AI Accelerator	DX-M2300 Jetson AGX Orin	Thin	BX-T3020 Celeron 4305UE	BX-T210R WL BX-T210 Atom E3940	BX-T310-G Atom x6413E	BX-T3000R-J2 WL BX-T3000-J2 Celeron 4305UE	BX-T3000R-J4 WL BX-T3000-J4 Core i3-8145UE	BX-T3000R-J5 WL BX-T3000-J5 Core i5-8365UE	BX-T3000R-J6 WL BX-T3000-J6 Core i7-8665UE
	DX-U2200 Jetson Orin NX					BX-T1020 Celeron 3965U		BX-T1010 Core i5-7300U	BX-T1000 Core i7-7600U
	DX-U2100 Jetson Orin Nano						BX-M4600-G3 Core i3-13100TE	BX-M4600-G5 Core i5-13500TE	BX-M4600-G7 Core i7-13700TE
	DX-U1220P1 1x PCIe DX-U1220 Jetson Xavier NX High-Capacity SSD	Ultra Small			Main Stream / High Expandability	BX-M3010-G2 Celeron 4305UE	BX-M3010-G5 Core i5-8365UE	BX-M2510-J8 Xeon E-2278GEL Wide temp range	
	DX-U1200P1 1x PCIe DX-U1210 Anti-Dust DX-U1200 Jetson Xavier NX					BX-M2510-J2 Celeron G4900T Wide temp range	BX-M2510-J4 Core i3-9100UE Wide temp range	BX-M2510-J5 Core i5-9500TE Wide temp range	BX-M2510-J8 Xeon E-2278GEL Wide temp range
	DX-U1100P1 1x PCIe DX-U1100 Jetson Nano	Cabinet	BX-C212-G Celeron N3350 2x COM Ports	CPS-BXC200 Atom E3950	BX-M210-J Atom E3940	BX-S3300 Celeron G4900T	BX-S3300P2 2x PCIe BX-S3300 Core i5-9500TE	BX-S3300P2 2x PCIe BX-S3300 Core i5-9500TE	BX-S3300P2 2x PCIe BX-S3300 Xeon E-2278GEL
			BX-C211-G Celeron N3350 3x PoE Ports			BX-S3000P2 2x PCIe(x8) BX-S3000P2A 2x PCI BX-S3000 Celeron G3900TE	BX-S3000P2 2x PCIe(x8) BX-S3000P2A 2x PCI BX-S3000 Core i5-6500TE	BX-S3000P2 2x PCIe(x8) BX-S3000P2A 2x PCI BX-S3000 Core i5-6500TE	BX-S3000P2 2x PCIe(x8) BX-S3000P2A 2x PCI BX-S3000 Core i7-6700TE
			BX-C210-G Celeron N3350			BX-M1020P4 1x PCIe(x4) / 3x PCI BX-M1020P2 2x PCI BX-M1020 Celeron 3965U	BX-M1010P4 1x PCIe(x4) / 3x PCI BX-M1010P2 2x PCI BX-M1010 Core i5-7300U		

WL : Wireless LAN

Embedded Computers EPC Series

CPU Spec		High Speed	
Intel Celeron	Intel Core i5	Intel Core i7	Intel Xeon
AC Input			
EPC-3010 Celeron G3900TE 1x PCIe(x8) / 3x PCI 2x PCI	EPC-C5010 Core i5-10500TE 1x PCIe(x16) or 2x PCIe(x8)	EPC-C5020 Core i7-10700TE 1x PCIe(x16) or 2x PCIe(x8)	EPC-C5060 Xeon W-1290TE 1x PCIe(x16) or 2x PCIe(x8)
			
	EPC-3010 Core i5-6500TE 1x PCIe(x8) / 3x PCI 2x PCI	EPC-3010 Core i7-6700TE 1x PCIe(x8) / 3x PCI 2x PCI	
			

High power / Cooling fan type

CPU Spec		High Speed	
Intel Core i5	Intel Core i7		
DC Input			
EPC-4000P4 4x PCIe(x4) EPC-4000P2 2x PCIe(x8) EPC-4000 Core i5-8500T	EPC-4000P4 4x PCIe(x4) EPC-4000P2 2x PCIe(x8) EPC-4000 Core i7-8700T		
			

BX-T3000 / BX-T3000R Series



8th Gen. (Whiskey Lake-U)

Core i7-8665UE

Core i5-8365UE

Core i3-8145UE

Celeron 4305UE

Features

- Ultra-compact design about as large as A5 size contributes to space-saving
- Rich interfaces for easy connection to various peripherals
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)
- "Power failure protection system" features power-off without OS shutdown
- High-security design contributes to a highly reliable system
- Contec customized BIOS provides useful utility

BX-T3020 Series



8th Gen. (Whiskey Lake-U)

Celeron 4305UE

Features

- Space-saving PC that contributes to the miniaturization of equipment
- "Power failure protection system" features power-off without OS shutdown
- High-security design contributes to a highly reliable system
- Contec customized BIOS provides useful utility
- Helps reduce running costs and energy consumption
- Major types of peripherals are supported with rich interfaces

BX-T1000 / BX-T1010 / BX-T1020 Series



7th Gen. (Kaby Lake-U)

Core i7-7600U

Core i5-7300U

Celeron 3965U

Features

- 7th Gen. Core™ i7 processor adopted
- A wide range of power supplies (10.8 - 31.2VDC) supported
- Major types of peripherals are supported with rich interfaces
- With retention fitting and cable clamp to stay trouble-free
- "Power failure protection system" features power-off without OS shutdown
- Safety design required for embedded applications

BX-T310-G Series



7th Gen. Atom (Elkhart Lake)

Atom x6413E

Features

- Embedded Intel Atom® x6413E processor adopted
- Slim A5 size design reduces maintenance work
- Wide range DC input and power management
- Major types of peripherals are supported with rich interfaces
- Dual Gigabit LAN ports and M.2 slot

BX-T210 / BX-T210R Series



5th Gen. Atom (Apollo Lake)

Atom E3940

Features

- Extremely compact space-saving PC with an A5 paper installation area
- Operation capable in a wide temperature range -20 to 70°C (-4 to 158°F)
- "Power failure protection system" features power-off without OS shutdown
- High-security design contributes to a highly reliable system
- Contec customized BIOS provides useful utility
- Rich variety of interfaces for easy connection to various peripheral devices

BX-U310 Series



7th Gen. Atom (Elkhart Lake)

Atom x6413E

Features

- Palm-sized ultra-compact PC
- Operation capable in a wide temperature range -10 to 60°C (14 to 140°F)
- "Power failure protection system" features power-off without OS shutdown
- High-security design contributes to a highly reliable system
- Contec customized BIOS provides useful utility
- Helps reduce running costs and energy consumption

BX-U200 / BX-U200R Series



5th Gen. Atom (Apollo Lake)

Atom E3940

Features

- Adopted the Intel Atom® x5-E3940 processor that reduces running costs and energy usage
- An extremely compact computer with an installation area the size of just two business cards that contributes to the miniaturization of equipment
- Operation capable in a wide temperature range -30 to 60°C (-22 to 140°F)
- Power supply/charging and video output with a single cable
- Compatible with Trellix white listing anti-virus software
- Wireless connections to various devices via wireless LAN and Bluetooth

CPS-BXC200 Series



5th Gen. Atom (Apollo Lake)

Atom E3950

Features

- Secured IoT device for edge computing
- Compatible with Trellix white listing anti-virus software
- Three Gigabit LAN ports interconnect differing network hierarchy
- I/O expansion modules with the same API functions as PCI Express, PCI, and USB bus products
- Operation capable in a wide temperature range -20 to 70°C (-4 to 158°F)
- Slitless and fanless design that reduces maintenance and inspection works

BX-C210-G / BX-C211-G / BX-C212-G Series



5th Gen. Atom (Apollo Lake)

Celeron N3350

Features

- Palm-sized small form factor
- 12 to 30 VDC ±20% wide voltage power input
- 64GB onboard eMMC 5.0 storage
- Fanless and Cableless design reduce maintenance work
- Rich I/O combination to fulfill customers in various needs
- Extra 3x PoE ports for customers with camera or wireless needs [BX-C211-G]
- Additional 2x COM and expansion slots for different solutions [BX-C212-G]

BX-M4600-G Series



Features

- | All new Intel® 13th Raptor Lake-S platform
- | CPU built-in high-performance graphics
- | Adopt removable storage
- | Extend peripherals freely rich interface
- | Features wide input voltage range and multiple circuit protection design

13th Gen. (Raptor Lake-S)

Core i7-13700TE

Core i5-13500TE

Core i3-13100TE

BX-S3300 / BX-S3300P2 Series



Features

- | Compatible with Intel® 9th Coffee Lake-Refresh platform
- | CPU built-in high-performance graphics
- | Adopt removable storage
- | Extend peripherals freely rich interface
- | Two expansion slots to hold PCI bus cards [BX-S3300P2]

9th Gen. (Coffee Lake R-S)

Xeon E-2278GEL

Core i7-9700TE

Core i5-9500TE

Core i3-9100TE

Celeron G4900T

BX-M2510 Series



Features

- | 9th Gen. Xeon, Core™ i5/i3, Celeron processor adopted
- | Operation capable in a wide temperature range -10 to 60°C (14 to 140°F)
- | "Power failure protection system" features power-off without OS shutdown
- | High-security design contributes to a highly reliable system
- | Contec customized BIOS provides useful utility
- | Major types of peripherals are supported with rich interfaces

9th Gen. (Coffee Lake R-S)

Xeon E-2278GEL

Core i5-9500TE

Core i3-9100TE

Celeron G4900T

BX-M3010 Series



Features

- | Improved CPU performance by Whiskey Lake-U processor
- | Enhanced graphics performance
- | Dual Gigabit LAN ports and M.2 slot
- | Major types of peripherals are supported with rich interfaces
- | 2.5" removable drive bay for easy maintenance

8th Gen. (Whiskey Lake-U)

Core i5-8365UE

Celeron 4305UE

BX-M1010 / BX-M1010P2 / BX-M1010P4 Series



Features

- | 7th Gen. Core™ i5 processor adopted
- | Fanless design reduces maintenance work
- | Major types of peripherals are supported with rich interfaces
- | The attachment fitting and cable ties prevent problems caused by cable disconnections
- | Safety design required for embedded applications
- | Two expansion slots to hold PCI bus cards [BX-M1010P2]
- | One PCI Express (x4) slot and three PCI slots are equipped [BX-M1010P4]

7th Gen. (Kaby Lake-U)

Core i5-7300U

BX-M1020 / BX-M1020P2 / BX-M1020P4 Series



Features

- | 7th Gen. Celeron processor adopted
- | Fanless design reduces maintenance work
- | Major types of peripherals are supported with rich interfaces
- | The attachment fitting and cable ties prevent problems caused by cable disconnections
- | Safety design required for embedded applications
- | Two expansion slots to hold PCI bus cards [BX-M1020P2]
- | One PCI Express (x4) slot and three PCI slots are equipped [BX-M1020P4]

7th Gen. (Kaby Lake-U)

Celeron 3965U

BX-M310-G Series



7th Gen. Atom (Elkhart Lake)

Atom x6413E



Features

- Embedded Intel Atom® x6413E processor adopted
- Fanless design reduces maintenance work
- Wide range DC input and power management
- Major types of peripherals are supported with rich interfaces
- Dual Gigabit LAN ports and M.2 slot

BX-M210(SATA) Series



5th Gen. Atom (Apollo Lake)

Atom E3940



Features

- Extremely compact space-saving PC with an A5 paper installation area
- Equipped with a rich interface with a slot-in 2.5-inch SATA disk slot
- "Power failure protection system" features power-off without OS shutdown
- Contec customized BIOS provides useful utility
- High-security design contributes to a highly reliable system
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)

BX-M210(GPIO) Series



5th Gen. Atom (Apollo Lake)

Atom E3940



Features

- Extremely compact space-saving PC with an A5 paper installation area
- Equipped with abundant interfaces such as 32 isolated digital inputs / 32 outputs
- "Power failure protection system" features power-off without OS shutdown
- Contec customized BIOS provides useful utility
- High-security design contributes to a highly reliable system
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)

EPC-C5000 Series



Features

- Compatible with Intel® Xeon® W / Core™ processor series Comet Lake
- CPU built-in high-performance graphics
- NVIDIA GPU card available
- Extend peripherals freely. Rich interface
- Equipped with expansion slots that can house PCI Express (x16) cards
- "Power failure protection system" features power-off without OS shutdown

10th Gen. (Comet Lake-S)

Xeon W-1290TE

Core i7-10700TE

Core i5-10500TE

Core i3-10100TE

* Other CPU options are available. Visit the Contec website for more information.

EPC-4000 / EPC-4000P2 / EPC-4000P4 Series



Features

- Support for the Coffee Lake-S Intel® Core™ processor series
- Freely expandable peripherals and a rich variety of interfaces
- Highly noise-resistant design with separated FG and SG
- "Power failure protection system" features power-off without OS shutdown
- Custom BIOS supporting real-time OS
- PCI Express x8 high speed expansion slot [EPC-4000P2]
- PCI Express x4 high speed expansion slot [EPC-4000P4]

8th Gen. (Coffee Lake-S)

Core i7-8700T

Core i5-8500T

DX-M2300 Series



Jetson AGX Orin



Features

- Edge AI accelerator equipped with NVIDIA® Jetson AGX Orin
- Standard-equipped with NVMe storage
- Long-term supply and maintenance
- Highly reliable and long-life components
- Two Gigabit LAN ports for alternating connections between different network layers
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)

DX-U2200 / DX-U2100 Series



Jetson Orin NX

Jetson Orin Nano



Features

- Edge AI accelerator powered by NVIDIA® Jetson Orin™ NX [DX-U2200]
- Edge AI accelerator powered by NVIDIA® Jetson Orin Nano™ [DX-U2100]
- Built-in NVMe storage
- 4G LTE Cat.4 communication model can be selected
- Four Gigabit LAN ports for alternating connections between different network layers
- Flexible installation
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)

DX-U1220 / DX-U1220P1 Series



Jetson Xavier NX



Features

- Edge AI accelerator equipped with NVIDIA® Jetson Xavier™ NX
- Equipped standard NVMe 256GB storage
- Equipped with various I/F such as USB 3.2 Gen2 4 ports
- Two Gigabit LAN ports for alternating connections between different network layers
- Flexible installation
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)
- Equipped with 1x Low Profile PCI Express(x1) slot [DX-U1220P1]

DX-U1200 / DX-U1210 / DX-U1200P1 Series



Jetson Xavier NX



Features

- Edge AI accelerator equipped with NVIDIA® Jetson Xavier™ NX
- Long-term supply and maintenance
- Highly reliable and long-life components
- Two Gigabit LAN ports for alternating connections between different network layers
- Flexible installation
- Operation capable in a wide temperature range -20 to 60°C (-4 to 140°F)
- Simple dustproof model make it easily possible to install on site [DX-U1210]
- Equipped with 1x Low Profile PCI Express(x1) slot [DX-U1200P1]

DX-U1100 / DX-U1100P1



Jetson Nano



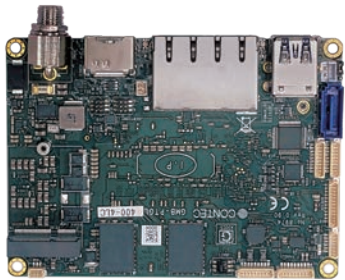
Features

- Edge AI accelerator equipped with NVIDIA® Jetson Nano™
- Long-term supply and maintenance
- Highly reliable and long-life components
- Two Gigabit LAN ports for alternating connections between different network layers
- Flexible installation
- Supports a wide range of temperatures with operations guaranteed from -20 to 60°C
- Equipped with 1x Low Profile PCI Express(x1) slot [DX-U1100P1]

Industrial Motherboards and SBCs

Scalable / S processor		Skylake-S	Coffee Lake-S Coffee Lake R-S	Comet Lake-S	Ice Lake-SP	Raptor Lake-S Alder Lake-S
Atom / U / P processor	Apollo Lake	Kaby Lake-U	Whiskey Lake-U			Raptor Lake-P Tiger Lake UP3 Elkhart Lake
Extended-ATX ATX 			GMB-AQ3701-LLVA 8th / 9th Gen. Core i / Celeron + Q370 GMB-AC2460-LLVA Xeon / 8th / 9th Gen. Core i / Celeron + C246	GMB-AW48000 Xeon / 10th Gen. Core i + W480E GMB-AQ47001 10th Gen. Core i + Q470E 2x PCIe(x16) / 3x PCIe(x4) GMB-AQ47000 10th Gen. Core i + Q470E 1x PCIe(x16) / 2x PCIe(x4)	GMB-EAC62100 3rd Gen. Xeon Scalable + C621A	GMB-AH61000 12th/13th Gen. Core i + H610
Micro-ATX 			GMB-MQ37000 8th Gen. Core i / Celeron + Q370			GMB-MQ67000 12th / 13th Gen. Core i + Q670
Mini-ITX 		SMB-C39U01-LLVA 7th Gen. Celeron SoC SMB-I73U01-LLVA 7th Gen. Core i SoC SMB-I76U01-LLVA 7th Gen. Core i SoC	GMB-IC24600 Xeon / 8, 9th Gen. Core i / Celeron + C246	GMB-IW48000 Xeon / 10th Gen. Core i + W480E		GMB-IQ67010 12th/13th Gen. Core i + Q670E GMB-IH61000 12th/13th Gen. Core i + H610 / H610E GMB-IRPL 13th Gen. Core i SoC GMB-IEHL210 7th Gen. Celeron SoC
3.5" Little Pico-ITX 	GMB-L3APL300 Atom SoC		GMB-L3WHL400 8th Gen. Core i7-8665UE SoC GMB-L3WHL300 8th Gen. Core i5-8345UE SoC GMB-L3WHL200 8th Gen. Core i3-8165UE SoC			GMB-L3TGL 11th Gen. Core i GMB-PTGL 11th Gen. Core i
PICMG 1.3 		GSPI-Q1700-LLVA 8th Gen. Core i	GSPI-Q3700-LLVA 8, 9th Gen. Core i	GSPI-Q4700-LLVA 10th Gen. Core i		

GMB-PTGL Series



Pico-ITX (2.5-inch)

11th Gen. (Tiger Lake UP3)

Features

- Intel® 11th Gen. Core™ processor (Tiger Lake UP3 SoC)
- Memory and storage options
- Versatile connectivity
- Versatile in various applications
- Security by TPM2.0 & Wide range DC input

GMB-L3TGL Series



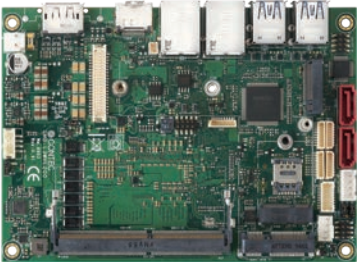
Features

- Intel® 11th Gen. Core™ i3/i5/i7 processor (Tiger Lake UP3 platform)
- Supported 2x DDR4-3200 SO-DIMM, up to 64GB
- 2x RJ-45 LAN port by 2.5GdE + 1GbE by internal (pinheaded)
- Equipped 1 x Full-sized Mini PCIe, 1 x M.2 Key M (2280) , and 1 x M.2 Key E (2230)
- Supported triple-display, LVDS, HDMI, and DisplayPort (Internal Type C support DP only)

3.5-inch

11th Gen. (Tiger Lake UP3)

GMB-L3WHL200 / 300 / 400



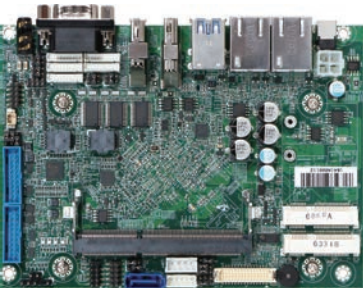
Features

- Intel® 8th Gen. Core™ i3-8145UE processor (Whiskey Lake-U) [GMB-L3WHL200]
- Intel® 8th Gen. Core™ i5-8365UE processor (Whiskey Lake-U) [GMB-L3WHL300]
- Intel® 8th Gen. Core™ i7-8665UE processor (Whiskey Lake-U) [GMB-L3WHL400]
- 1 x DDR4-2400 Non-ECC SO-DIMM, up to 16 GB Supported
- 1 x Full-sized Mini PCIe, 1 x M.2 2280 Key M, and 1 x M.2 2230 Key E Equipped
- Triple-display, HDMI, DisplayPort, and LVDS Supported

3.5-inch

8th Gen. (Whiskey Lake-U)

GMB-L3APL300



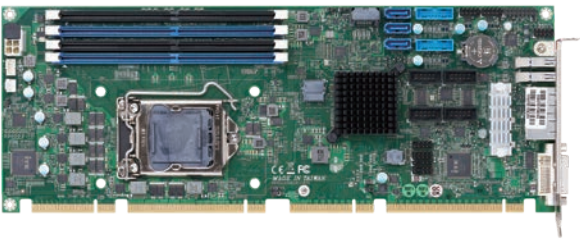
Features

- Compatible with Intel Atom® Apollo Lake platform
- Multi-display supported
- Dual Mini-PCIe expansion slots
- Extend peripherals freely with rich interfaces

3.5-inch

5th Gen. Atom (Apollo Lake)

GSPI-Q4700-LLVA



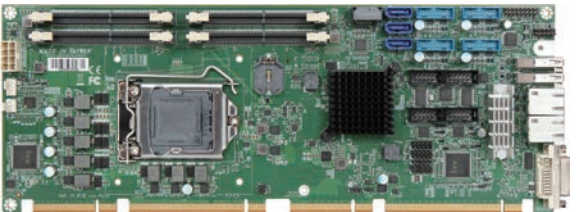
Features

- Intel® 10th Comet Lake-S platform
- Multi-display supported
- Dual Gigabit Ethernet
- Extend peripherals freely with rich interfaces

PICMG 1.3

10th Gen. (Comet Lake-S)

GSPI-Q3700-LLVA



Features

- Support Intel® Core™ i3/i5/i7 / Pentium / Celeron processors (LGA1151)
- Deliver up to 128GB maximum DDR4-2133 SO-DIMM on four sockets
- Support multiple displays by DVI-I(DVI-D+VGA) and HDMI
- Dual Gigabit Ethernet based on PCI express x1, high bandwidth I/O interface
- Rich I/O connections such as four serial ports, USB 3.0, SATAIII ports
- Support on board TPM2.0

PICMG 1.3

9th Gen. (Coffee Lake R-S)

8th Gen. (Coffee Lake-S)

GSPI-Q1700-LLVA



Features

- Uses processors from the 6th and 7th Gen. of the Intel® Core™ processor family
- Support multiple displays by DVI-I(DVI-D+VGA) and HDMI
- Rich variety of interfaces for freely expandable peripherals

PICMG 1.3

7th Gen. (Kaby Lake-S)

6th Gen. (Skylake-S)

GMB-IQ67010



Features

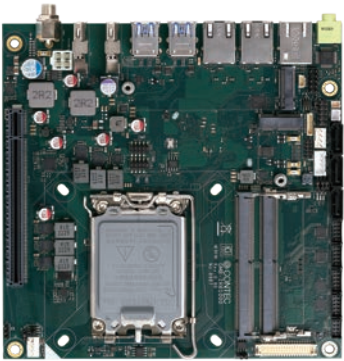
- Intel® 12th / 13th Gen. Alder Lake-S / Raptor Lake-S platform
- Supports up to DDR5-4800 SO-DIMM Max 64GB (Non-ECC)
- Dual display supported
- Supports 4 x RJ45 Gigabit LAN ports
- Equipped with rich interfaces
- DC-In power range from 12 to 24VDC

Mini-ITX

13th Gen. (Raptor Lake-S)

12th Gen. (Alder Lake-S)

GMB-IH61000



Features

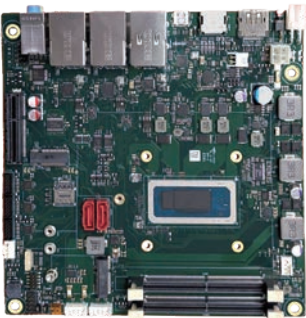
- Intel® 12th / 13th Alder Lake-S / Raptor Lake-S platform
- Multi Display Supported
- Triple Gigabit Ethernet
- Extend peripherals freely with rich interfaces
- Build-In TPM2.0

Mini-ITX

13th Gen. (Raptor Lake-S)

12th Gen. (Alder Lake-S)

GMB-IRPL



Features

- Intel® 13th Raptor Lake-P platform
- Triple Gigabit Ethernet
- Extend peripherals freely with rich interfaces
- Supported Build-In TPM2.0

Mini-ITX

13th Gen. (Raptor Lake-P)

GMB-IW48000



Features

- Better performance and protection
- Media & display features for premium 4K content support
- Software RAID available
- Expansion slot & extend peripherals with rich interfaces
- Manageability at the edge

Mini-ITX

10th Gen. (Comet Lake-S)

GMB-IC24600



Features

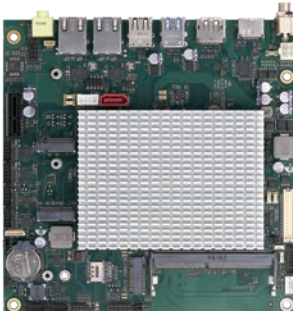
- Compatible with Intel® 9th Coffee Lake-Refresh platform
- Multi-display Supported
- Triple Gigabit Ethernet
- Extend peripherals freely with rich interfaces
- Support on board TPM2.0

Mini-ITX

9th Gen. (Coffee Lake R-S)

8th Gen. (Coffee Lake-S)

GMB-IEHL210



Features

- Intel® Elkhart Lake platform
- Dual 2.5 Gbps LAN ports and M.2 support
- Triple displays output support
- Extend peripherals freely with rich interfaces

Mini-ITX

7th Gen. Atom (Elkhart Lake)

SMB-C39U01-LLVA / -I73U01-LLVA / -I76U01-LLVA



Features

- | 7th Gen. Kaby Lake-U processor adopted
- | M.2 slot realizes high-speed data transfer
- | Fanless design reduces maintenance work
- | A wide range of power supplies (10.8 to 31.2VDC) supported
- | Major types of peripherals are supported with rich interfaces
- | Celeron® 3965U processor [SMB-C39U01-LLVA]
- | Core™ i5-7300U processor [SMB-I73U01-LLVA]
- | Core™ i7-7600U processor [SMB-I76U01-LLVA]

Mini-ITX

7th Gen. (Kaby Lake-U)

GMB-MQ67000



Features

- | Intel® 12th Alder Lake-S / 13th Raptor Lake-S platform
- | Multi-display supported
- | Triple Gigabit Ethernet
- | Extend peripherals freely with rich interfaces

Micro-ATX

13th Gen. (Raptor Lake-S)

12th Gen. (Alder Lake-S)

GMB-MQ37000



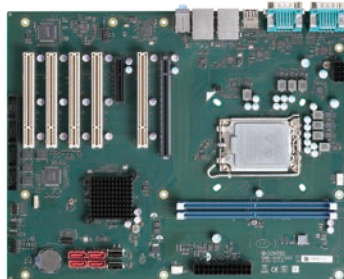
Features

- | Support Intel® 8th Gen. Core™ processor (LGA1151)
- | Up to 64 GB maximum DDR4 2666 MHz non ECC U-DIMM on 4 sockets.
- | 1 x PCIe by 16 (Gen 3) , 2 x PCIe by 4 (Gen 3) , 1 x PCI
- | 6 x SATA 3.0 ports and 14 x USB Ports
- | 3 x Giga LAN port with 1x Intel® I219LM and 2 x intel® I211AT
- | DVI-I + HDMI 1.4+ Display port 1.2 by I/O panel

Micro-ATX

8th Gen. (Coffee Lake-S)

GMB-AH61000



Features

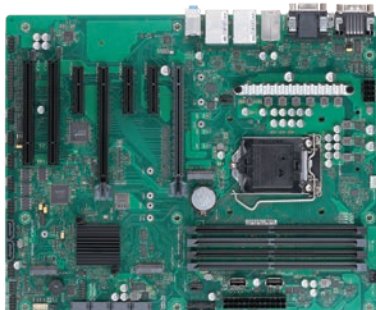
- | Intel® 12th / 13th Gen. Alder Lake-S / Raptor Lake-S platform
- | Multi-display supported
- | Dual Gigabit Ethernet by Intel® controller
- | Extend peripherals freely with rich interfaces

ATX

13th Gen. (Raptor Lake-S)

12th Gen. (Alder Lake-S)

GMB-AQ47001



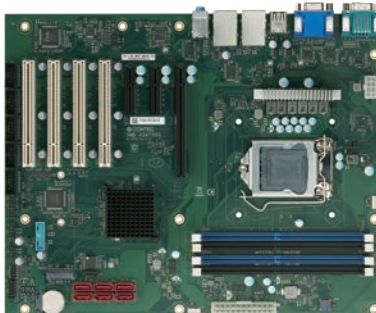
Features

- | Intel® 10th Comet Lake-S platform
- | High expandability for Vision application
- | 4 displays supported
- | Dual Gigabit Ethernet

ATX

10th Gen. (Comet Lake-S)

GMB-AQ47000



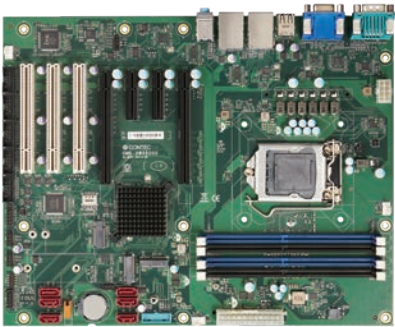
Features

- | Intel® 10th Comet Lake-S platform
- | Multi-display supported
- | Dual Gigabit Ethernet
- | Extend peripherals freely with rich interfaces

ATX

10th Gen. (Comet Lake-S)

GMB-AW48000



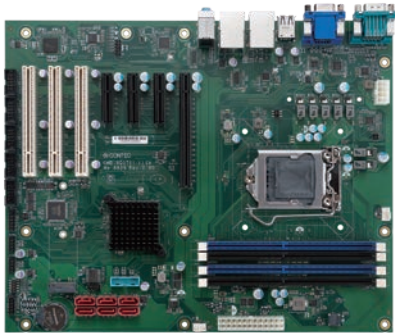
ATX
10th Gen. (Comet Lake-S)



Features

- High-end server grade performance and protection
- Media & display features for Premium 4K content supports
- Software RAID available
- Rich I/O design for expansion slots & extend peripherals
- Manageability at the edge

GMB-AQ3701-LLVA



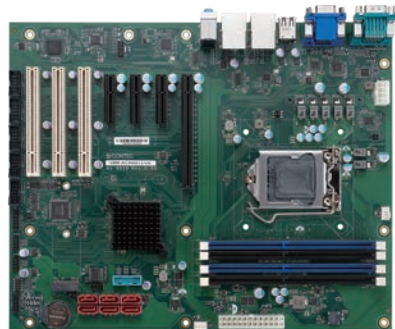
ATX
9th Gen. (Coffee Lake R-S) 8th Gen. (Coffee Lake-S)



Features

- Supports Intel® 8th / 9th Gen. Core™ desktop processors (LGA1151)
- Up to 64 GB in 4 slots 288-pin UDIMM sockets
- Supports dual channelDDR4 2400/2666 MHz ECC SDRAM
- 1 x PCIe by 16, 3 x PCIe by 4 + 3 x PCI slot
- 6x SATA 3.0 (6Gb/s) ports and 12x USB ports
- Dual Giga LAN port with intel® I219LM and intel® I211AT
- VGA + HDMI+ Display port by I/O panel

GMB-AC2460-LLVA



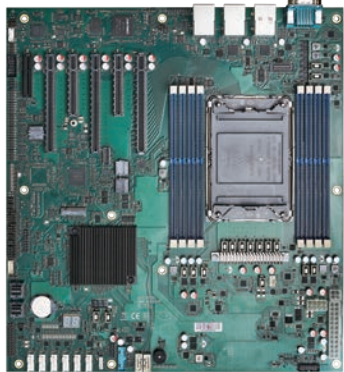
ATX
9th Gen. (Coffee Lake R-S) 8th Gen. (Coffee Lake-S)



Features

- Supports Intel® 8th / 9th Gen. Core™ desktop processors (LGA1151)
- Up to 64 GB in 4 slots 288-pin UDIMM sockets
- Supports dual channel DDR4 2400/2666 MHz ECC SDRAM
- 1 x PCIe by 16, 3 x PCIe by 4 + 3 x PCI slot
- 6x SATA 3.0 (6Gb/s) ports and 12x USB ports
- Dual Giga LAN port with intel® I219LM and intel® I210AT
- VGA + HDMI+ Display port by I/O panel

GMB-EAC62100



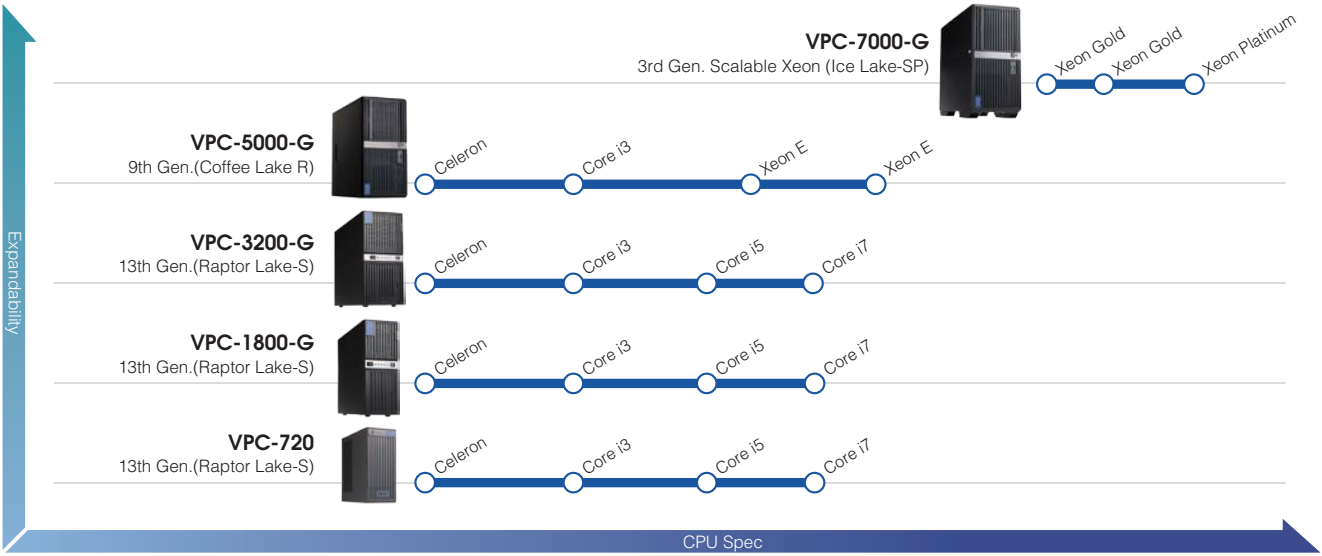
Extended-ATX
3rd Gen. Xeon Scalable (Ice Lake-SP)



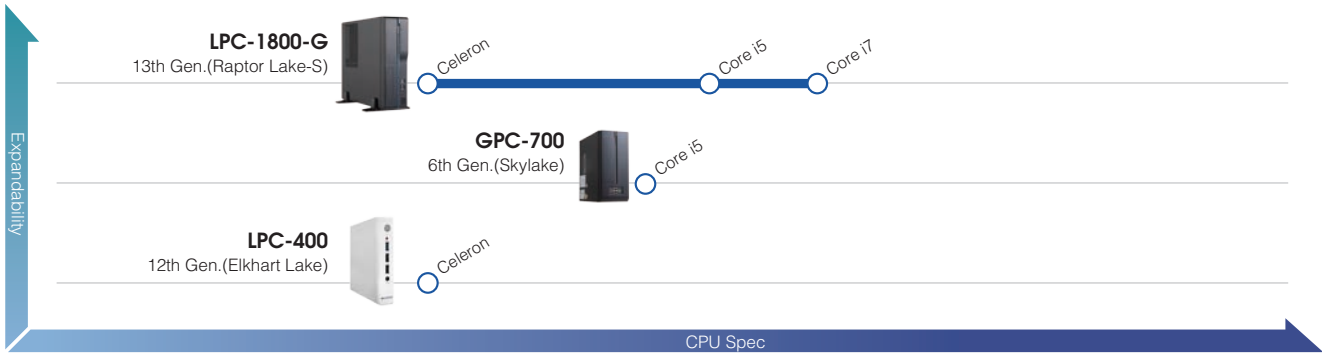
Features

- Compatible with Intel® Ice Lake-SP platform
- HPC and GPU computing support
- Adopt removable storage
- BMC function
- Support Windows 10 IoT Enterprise 2019 LTSC and Windows Server IoT 2019

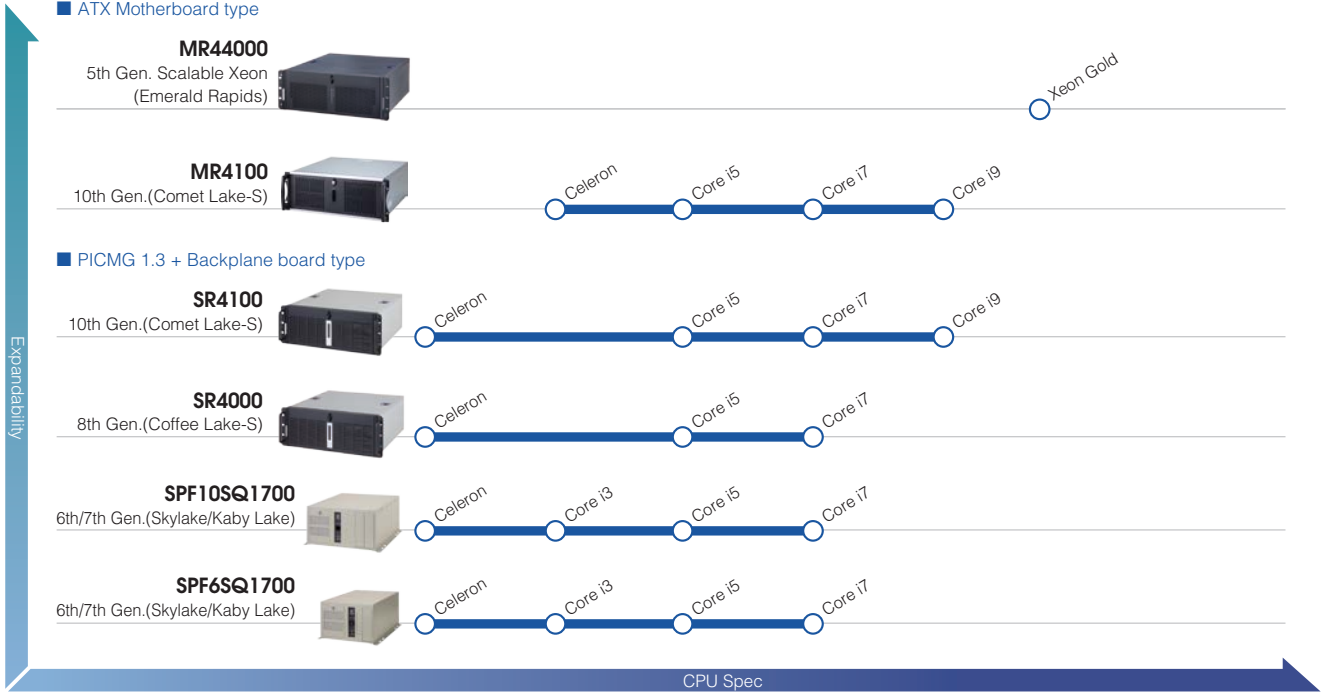
FA Computers VPC Series



Business Computers LPC/GPC Series



Custom Computers Solution-ePC Series



VPC-7000-G Series



CE FC VCE1 RoHS


Features

- High-end FA computer compatible with Intel® Xeon® Scalable processor
- Supports GPU computing
- Uses highly reliable and long-life parts on the premise of continuous operation for 24 hours
- Achieves long-term supply and long-term maintenance

3rd Gen. Scalable Xeon (Ice Lake-SP)

Xeon Platinum 8352Y Xeon Gold 6354 Xeon Gold 6330

VPC-5000-G Series



FC VCE1 RoHS

Features

- High performance FA computer with Xeon processor compatible
- Highly reliable and long life components based on 24-hour operation
- Support Windows 10 IoT Enterprise LTSC and Windows Server IoT
- Long-term product availability and maintenance

9th Gen.(Coffee Lake R-S)

Xeon E-2278GE Xeon E-2226GE

Core i3-9100E Celeron G4900

VPC-3200-G Series



CE FC UK CA VCE1 RoHS

Features

- Intel® Core™ processor series Raptor Lake-S supported
- High-performance graphics with CPU embedded type
- Mirroring (RAID1) supported
- Removable storage adopted
- Expand your peripherals with various interfaces

13th Gen.(Raptor Lake-S)

Core i7-13700TE Core i5-13500TE

Core i3-13100TE Celeron G6900TE

VPC-1800-G Series



13th Gen.(Raptor Lake-S)
Core i7-13700TE Core i5-13500TE
Core i3-13100TE Celeron G6900TE



Features

- Intel® Core™ processor series Raptor Lake-S supported
- High-performance graphics with CPU embedded type
- Mirroring (RAID1) supported
- Removable storage adopted
- Expand your peripherals with various interfaces
- The selection of expansion slots from 1x PCI-Express(x1), 2x PCI or 3x PCI

VPC-720 Series



13th Gen.(Raptor Lake-S)
Core i7-13700TE Core i5-13500TE
Core i3-13100TE Celeron G6900TE



Features

- Supports Intel® Core™ processor series Rapter Lake-S
- Compact size that can be installed in a small space
- Adopts removable storage structure
- Supports mirroring (RAID1)
- Abundant interfaces for freely expanding peripheral devices

GPC-700 Series



6th Gen.(Skylake)
Core i5-6500



Features

- Equipped with Powerful 6th Gen. Intel® Core™ processor for edge computing
- 3 independent Gigabit LAN ports to connect different network segments
- Built-in GPU supports 4K resolution and output to three screens
- Equipped with one expansion slot that can house Low Profile PCI Express(x16) card
- Conforming to 21 global standards

Standard : VCCI Class B, FCC Class B, CE Marking (EMC Directive Class B, Low Voltage Directive, RoHS2 Directive, WEEE Directive), UKCA, CSA, NOM, IRAM, Ukr Sepro, INSM, IEC/ Israel 60950, CCC, KC Class A, BSMI, RCM, PSB, NRCS LOA, KS Compliance, PvoC, SONCAP, KVALITET, BIS

LPC-1800-G Series



13th Gen.(Raptor Lake-S)
Core i7-13700TE Core i5-13500TE
Celeron G6900TE



Features

- Intel® Core™ processor series Raptor Lake-S supported
- High-performance graphics with CPU embedded type
- Mirroring (RAID1) supported
- Removable storage adopted
- Expand your peripherals with various interfaces
- The selection of expansion slots from 1x PCI-Express(x1), 2x PCI or 3x PCI

LPC-400 Series



12th Gen.(Elkhart Lake)
Celeron J6412



Features

- Ultra Compact Business Computer That Can Be Installed Anywhere
- Small size but with many expansion interfaces and security slots
- Embedded OS with lockdown function
- Contec customized BIOS provides useful utility
- Fanless design reduces maintenance work
- Uses Intel® Celeron® J6412 processor

MR44000 Series



5th Gen. Scalable Xeon (Emerald Rapids)
Xeon Gold 6530



Features

- Supports 5th Gen. Intel® Xeon® Scalable Processors
- PCI Express expandable up to 7 slots
- Supports HPC and GPU computing
- Long-term supply and maintenance
- 4xPCI Express (x16), 3xPCI Express (x4)

MR4100 Series



10th Gen.(Comet Lake-S)
Core i9-10900E Core i7-10700E
Core i5-10500E Core i3-10100E



Features

- High-power, 4U rack-mounted PC
- Up to 7 slots of PCI and PCI Express can expand / Expandable with a total of 7 slots for PCI and PCI Express
- Equipped with various interfaces as standard
- Supports Windows 10 IoT Enterprise 2021 LTSC in multiple languages
- MIRACLE LINUX 9.0 support

SR4100 / SR4110 / SR4120 Series



10th Gen.(Comet Lake-S)
Core i9-10900E Core i7-10700E
Core i5-10500E Celeron G5900E



Features

- Compatible with Intel® Core™ processor series
- CPU and chipset designed for embedded devices
- Expandable up to 11 slots of PCI and PCI Express
- Rich variety of interfaces for freely expandable peripherals
- Reliable, Japan-made power supply
- Adapted an industrial single board computer
- SR4100:1xPCIe(x16)(x8 signal), 1xPCIe(x8)(x4 signal), 9xPCI
- SR4110:1xPCIe(x16)(x8 signal), 2xPCIe(x8)(x4 signal), 8xPCIe(x4)(x1 signal)
- SR4120:1xPCIe(x16)(x8 signal), 2xPCIe(x8)(x4 signal), 4xPCIe(x4)(x1 signal), 4xPCI

SR4000 Series



8th Gen.(Coffee Lake-S)
Core i7-8700 Core i5-8500 Celeron G4900



Features

- Compatible with Intel® Core™ processor series Coffee Lake-S
- CPU and chipset designed for embedded devices
- Expandable up to 11 slots of PCI and PCI Express
- Rich variety of interfaces for freely expandable peripherals
- Adapted an industrial single board computer
- 1xPCIe(x16)(x8 signal), 1xPCIe(x8)(x4 signal), 9xPCI

SPF10SQ1700 Series



7th Gen.(Kaby Lake) 6th Gen.(Skylake)
Core i7-7700 Core i7-6700 Core i5-7500
Core i5-6500 Core i3-7101E Core i3-6100
Celeron G3930E Celeron G3900



Features

- Compatible with Intel® Core™ processor series Skylake/ Kaby Lake
- Compact wall-mounted design
- CPU and chipset designed for embedded devices
- Expandable to up to eight PCI and PCI Express slots
- Rich variety of interfaces for freely expandable peripherals

SPF6SQ1700 Series



7th Gen.(Kaby Lake) 6th Gen.(Skylake)
Core i7-7700 Core i7-6700 Core i5-7500
Core i5-6500 Core i3-7101E Core i3-6100
Celeron G3930E Celeron G3900



Features

- Compatible with Intel® Core™ processor series Skylake/ Kaby Lake
- Compact wall-mounted design
- Expandable to up to five PCI and PCI Express slots
- Rich variety of interfaces for freely expandable peripherals
- Reliable, Japan-made power supply

All-in-One Computers

	7"	10" to 12"	15" to 17"	18" to 21"
Panel-mount	<div>PT-M07WA-310</div> <div>7" / Analog / Atom x6425E</div> <div></div>	<div>PT-M10WB-300</div> <div>10.1" / PCAP / Atom x6413E</div> <div></div> <div>XPT-T1000LX</div> <div>12.1" / Analog / Core i7-7600U</div> <div></div> <div>XPT-T1010LXC</div> <div>12.1" / Analog / Core i5-7300U</div> <div></div> <div>PT-M12SA-300-G</div> <div>12.1" / Analog / Atom x6413E</div> <div></div> <div>PT-M12SA-210</div> <div>12.1" / Analog / Atom E3940</div> <div></div>	<div>XPT-T1000HX</div> <div>15" / Analog / Core i7-7600U</div> <div></div> <div>PT-S3000HX</div> <div>15" / Analog / Core i</div> <div></div> <div>PT-M15SA-210</div> <div>15" / Analog / Atom E3940</div> <div></div> <div>PT-M17SB-2500-G</div> <div>17" / PCAP / Core i</div> <div></div>	<div>PT-M21WB-2500-G</div> <div>21.5" / PCAP / Core i</div> <div></div>
VESA-mount		<div>PT-V10WB-210R WL</div> <div>PT-V10WB-210</div> <div>Fingerprint-resistant Touch</div> <div>10.1" / PCAP / Atom E3940</div> <div></div> <div>PT-V10WB-210R</div> <div>PT-V10WB-200R WL</div> <div>PT-V10WB-200</div> <div>10.1" / PCAP / Atom E3940</div> <div></div> <div>PT-V10WB-200R</div>	<div>PT-V15WB-200R WL</div> <div>PT-V15WB-200</div> <div>15.6" / PCAP / Atom E3940</div> <div></div> <div>PT-V15WB-200R</div>	<div>CA-ME215PE4</div> <div>21.5" / PCAP / Core i / IPX2 / WL / Medical</div> <div></div> <div>PT-V18WB-210DR WL</div> <div>PT-V18WB-210D</div> <div>18.5" / PCAP / Atom E3940 / IPX2</div> <div></div> <div>PT-V18WB-210DR</div>
Open-frame		<div>PT-F10SA-320</div> <div>10.4" / Analog / Atom x6425E</div> <div></div> <div>PT-F12SA-320</div> <div>12.1" / Analog / Atom x6425E</div> <div></div>		
Desk-top		<div>PT-D10WB-300</div> <div>10.1" / PCAP / Atom x6413E</div> <div></div>		

Analog : Analog Resistive Touch, PCAP : Projected Capacitive (PCAP) Touch, Optical : Optical Imaging Touch
WL : Wireless LAN, IPX2 : Water Resistant (IPX2), NFC : Built-in NFC card reader/writer, Medical : Medical Grade IEC60601

PT-M07WA-310 Series



- Panel-mount
- 7"
- Analog
- Atom x6425E

Features

- Contributing to running cost reduction and energy efficiency
- Fanless design that reduces maintenance and inspection work
- Remote power management function to reduce operation tasks
- Major types of peripherals are supported with rich interfaces
- "Power failure protection system" features power-off without OS shutdown
- Contec customized BIOS provides useful utility

PT-M10WB-300 Series



- Panel-mount
- 10.1"
- PCAP
- Atom x6413E

Features

- Contributing to reduction of running cost and promotion of energy efficiency
- Safe even if power is interrupted. UPS backup power supply, OS automatic shutdown function
- Abundant expansion interface matched with device incorporation
- Capacitive touch screen adopted
- Fanless design that reduces maintenance and inspection work
- Vertical screen installation possible

XPT-T1000LX Series



- Panel-mount
- 12.1"
- Analog
- Core i7-7600U

Features

- 7th Gen. Core™ i7 processor adopted
- Adopting a 5-wire resistive film touch-screen holds high durability
- Major types of peripherals are supported with rich interfaces
- A wide range of power supplies (10.8 to 31.2VDC) supported
- "Power failure protection" features power-off without OS shutdown
- Safety design required for embedded applications

XPT-T1010LXC Series



Features

- | 7th Gen. Core™ i5 processor adopted
- | Fan-less design reduces maintenance work
- | "Power failure protection system" features power-off without OS shutdown
- | A wide range of power supplies (10.8 to 31.2VDC) supported
- | Major types of peripherals are supported with rich interfaces
- | Adopting a 5-wire resistive film touch-screen holds high durability

Panel-mount

12.1"

Analog

Core i5-7300U

PT-M12SA-300-G Series



Features

- | Intel® Elkhart Lake platform by x6413E processor
- | IP65 front bezel aluminum & dustproof application
- | Fanless design with removeable 2.5" storage driver bay
- | Dual 2.5GbE, 4x COM, 6x USB ports, 1x GPIO, 1x VGA , 1x DP and other rich expansion interfaces
- | Wide range DC input

Panel-mount

12.1"

VESA-mount

Analog

Atom x6413E

PT-M12SA-210 Series



Features

- | Contributing to reduction of running cost and promotion of energy efficiency
- | Fan-less design reduces maintenance work
- | Adopting a 5-wire resistive film touch-screen holds high durability
- | "Power failure protection system" features power-off without OS shutdown
- | High-security design contributes to a highly reliable system
- | Contec customized BIOS provides useful utility

Panel-mount

12.1"

VESA-mount

Analog

Atom E3940

XPT-T1000HX Series



Features

- | 7th Gen. Core™ i7 processor adopted
- | Adopting a 5-wire resistive film touch-screen holds high durability
- | Major types of peripherals are supported with rich interfaces
- | A wide range of power supplies (10.8 to 31.2VDC) supported
- | "Power failure protection system" features power-off without OS shutdown
- | Safety design required for embedded applications

Panel-mount

15"

Analog

Core i7-7600U

PT-S3000HX Series



Features

- | Intel® 6th Gen. Skylake platform
- | Silent fanless design with high airtight chassis
- | IP65 front panel for waterproof & dustproof applications
- | 15" LCD with long-life touch screen and LED backlight for power saving
- | Support 5-wire resistive
- | Dual Giga LAN, 2x COM, 4x USB 3.0, 2x USB 2.0, 1x DVI-I, 1x DP and other rich expansion interface

Panel-mount

15"

Analog

Core i7-6700TE

Core i5-6500TE

Celeron G3900TE

PT-M15SA-210 Series



Features

- | Contributing to reduction of running cost and promotion of energy efficiency
- | Fan-less design reduces maintenance work
- | Adopting a 5-wire resistive film touch-screen holds high durability
- | "Power failure protection system" features power-off without OS shutdown
- | High-security design contributes to a highly reliable system
- | Contec customized BIOS provides useful utility

Panel-mount

15"

VESA-mount

Analog

Atom E3940

PT-M17SB-2500-G Series



Features

- Compatible with Intel® 9th Gen. Coffee Lake-Refresh platform
- IP65 + true flat front panel design
- CPU built-in high-performance graphics
- Adopt removable storage
- Extend peripherals freely rich interfaces

Panel-mount	VESA-mount
17"	PCAP
Core i7-9700TE	Core i5-9500TE
Core i3-9100TE	Celeron G4900T

PT-M21WB-2500-G Series



Features

- Compatible with Intel® 9th Gen. Coffee Lake-Refresh platform
- IP66 + stainless front panel design
- CPU built-in high-performance graphics
- Adopt removable storage
- Extend peripherals freely rich interfaces

Panel-mount	VESA-mount
21.5"	PCAP
Core i7-9700TE	Core i5-9500TE
Core i3-9100TE	Celeron G4900T

PT-V10WB-200 / 200R / 210 / 210R Series



Features

- Projected capacitive (PCAP) touch panel [PT-V10WB-200/200R]
- Project capacitive (PCAP) touch panel with fingerprint-resistant and oil-repelling coating [PT-V10WB-210/210R]
- The compact design features flexibility in installation
- Both DC input connectors, a jack type and a terminal block type are quipped with the unit for optimized use
- Fan-less design that reduces maintenance and inspection work
- VESA standard support
- "Power failure protection system" features power-off without OS shutdown
- Wireless connections to various devices via wireless LAN and Bluetooth [PT-V10WB-200R/210R]

VESA-mount	PCAP	Atom E3940
10.1"		

PT-V15WB-200 / 200R Series



Features

- Projected capacitive (PCAP) touch panel
- The compact design features flexibility in installation
- Both DC input connectors, a jack type and a terminal block type are quipped with the unit for optimized use
- Fan-less design that reduces maintenance and inspection work
- VESA standard support
- "Power failure protection system" features power-off without OS shutdown
- Wireless connections to various devices via wireless LAN and Bluetooth [PT-V15WB-200R]

VESA-mount	PCAP	Atom E3940
15.6"		

PT-V18WB-210D / 210DR Series



Features

- IPX2 drip-proof structure for the entire casing and IP65 dust- and drip-proof structure for the front section
- Uses a stainless steel casing that resists rust
- Uses a projected capacitive (PCAP) touch panel that can be used even while wearing gloves
- Power Failure Protection system for reliable operation with no OS shutdown required
- Convenient utilities based on Contec's originally designed BIOS
- VESA standard support
- Wireless connections to various devices via wireless LAN and Bluetooth [PT-V18WB-210DR]

VESA-mount	PCAP	Atom E3940
18.5"		

CA-ME215PE4 Series



Features

- Intel® Tiger Lake 11th Gen UP3 Core™ i5 processor
- 21.5" 16:9 FHD Panel supporting gloved touch
- Front web camera
- Up to 64GB DDR4L SDRAM and up to 1TB SSD
- Customized Windows 10 IoT Enterprise
- IEC 60601 certified and Front IP65 dust and water ingress protection

VESA-mount	Desk-top	Wall-mount
21.5"	PCAP	Core i5-1145G7E

PT-F10SA-320 Series



Features

- Contributing to running cost reduction and energy efficiency
- Fanless design that reduces maintenance and inspection work
- Remote power management function to reduce operation tasks
- Major types of peripherals are supported with rich interfaces
- "Power failure protection system" features power-off without OS shutdown
- Contec customized BIOS provides useful utility

Open-frame		
10.4"	Analog	Atom x6425E

PT-F12SA-320 Series



Features

- Contributing to running cost reduction and energy efficiency
- Fanless design that reduces maintenance and inspection work
- Remote power management function to reduce operation tasks
- Major types of peripherals are supported with rich interfaces
- "Power failure protection system" features power-off without OS shutdown
- Contec customized BIOS provides useful utilit

Open-frame		
12.1"	Analog	Atom x6425E

PT-D10WB-300 Series



Features

- Installable computer with desktop-type touch screen
- Safe even if power is interrupted. UPS backup power supply, OS automatic shutdown function
- Abundant expansion interface matched with device incorporation
- Projected capacitive (PCAP) touch panel
- Fan-less design that reduces maintenance and inspection work

Desk-top		
10.1"	PCAP	Atom x6413E

FPD-V11WB-10 Series



Panel-mount	VESA-mount
11.6"	PCAP

Features

- | HDMI and USB Type-C (DP Alt mode) input support
- | USB PD support
- | Host PC power supply interlock function

* Support may vary depending on the time the product was sold. Contact your retailer for more information.

GPD-H64XT-AC Series



VESA-mount	Desk-top
15"	Analog

Features

- | Adopts an analog resistive type touch panel
- | Compatible with VESA standard (100 x 100 mm)
- | Uses non-glare treated TN panel
- | Complies with various safety standards

CM-ME121P Series



VESA-mount	Desk-top
12.1"	PCAP

Features

- | Ultra-compact 12.1" form factor with near-square aspect ratio
- | One-click touch enable/disable soft key located on the front of the monitor
- | USB hub to power connected devices and 24V/1.5A medical-grade power adapter with locking mechanism (optional)
- | IP65-rated front bezel
- | Advanced Projected Capacitive (PCAP) touch technology
- | Long-Life, revision controlled bill of materials (BOM)

CM-ME150R Series



VESA-mount	Desk-top
15"	Analog

Features

- | 15" medical-grade display with 1024 x 768 (4:3) resolution
- | 5-wire resistive touch with USB/RS-232C combo touch interface
- | 350 nits screen brightness
- | World class medical safety regulations and certifications
- | Life cycle management and revision control

CM-ME170R Series



VESA-mount	Desk-top
17"	Analog

Features

- | 17" medical display with 1280 x 1024 (5:4) resolution
- | 5-wire resistive touch with USB/RS-232C combo touch interface
- | 250 nits screen brightness
- | World class medical safety regulations and certifications
- | Life cycle management and revision control

CM-ME185P Series



VESA-mount	Desk-top
18.5"	PCAP

Features

- True-Flat Front IPx5 monitor for easy cleaning and sanitization
- DICOM Part 14 compliant with 10 bits LUT
- 18.5" medical display with 166 x 768 (16:9) resolution
- World class medical safety regulations and certifications
- Life cycle management and revision control

CM-ME190R Series



VESA-mount	Desk-top
19"	Analog

Features

- 19" medical display with 1280 x 1024 (5:4) resolution
- 5-wire resistive touch with USB/RS-232C combo touch interface
- 250 nits screen brightness
- World class medical safety regulations and certifications
- Life cycle management and revision control

CM-ME215P Series



VESA-mount	Desk-top
21.5"	PCAP

Features

- True-Flat Front IP65 monitor for easy cleaning and sanitization
- DICOM Part 14 compliant with 12 bits LUT
- 21.5" medical display 1920 x 1080 (16:9) resolution
- PCAP touch with USB/RS-232C combo interface
- World class medical safety regulations and certifications
- Life cycle management and revision control

CM-ME238P Series



VESA-mount	Desk-top
23.8"	PCAP

Features

- 23.8" medical display 1920 x 1080 (16:9) resolution
- PCAP touch with USB/RS-232C combo interface
- 250 nits screen brightness
- True-Flat Front IP65 monitor for easy cleaning and sanitation
- DICOM Part 14 compliant
- IEC 60601 medical safety and performance rated

CM-ME270P Series



VESA-mount	Desk-top
27"	PCAP

Features

- Elegant and compact design
- True-Flat front IP65 monitor for easy cleaning and sanitization
- 3000:1 High contrast delivering crisp image quality
- DICOM Part 14 Compliant with 12 Bits LUT
- 1780 x 1780 Ultra wide viewing angle
- World class medical safety regulations and certification

CI-DK070P Series



Features

- | 7" LCD with 800 x 480 WVGA resolution and 500nits brightness with LED backlight
- | -10 to 60°C(14 to 140°F) Wide operating temperature and compatible with Windows and Linux OS
- | Long-life industrial grade LCD panel and US-based touch screen integration and support
- | PCAP touch with USB interface and LVDS interface
- | LED driver board built-in

7"

PCAP

CM-PO190I Series



Features

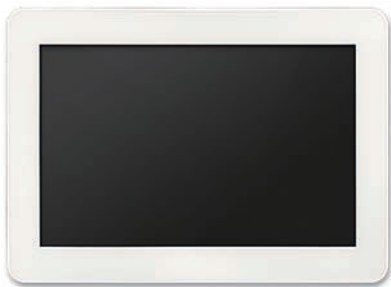
- | Durable, rugged design for high traffic areas
- | Safer, contactless / touchless touch technology reduces the spread of infectious diseases
- | Responsive and precise input control
- | 1000:1 contrast ratio
- | 450 nits brightness
- | 1280 x 1024 SXGA resolution

VESA-mount

19"

Infrared

CM-CL101P40WX-B Series



Features

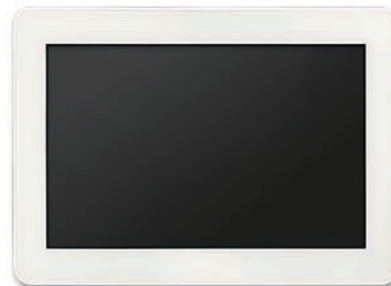
- | Fully integrated Zebra SE3307WA 1D/2D barcode scanner
- | Front IP65 rated for dust and liquid ingress protection
- | Custom firmware supports full-size Microsoft QWERTY keyboard for improved data entry
- | Versatile mounting options for any application
- | Compact 10.1" 1200 x 800 WXGA display
- | PCAP Multi-Touch supports up to 10-Point touch

VESA Mount

10.1"

PCAP

CM-CL101P40WX Series



Features

- | Compact 10.1" 1200 x 800 WXGA display
- | Front IP65 rated for dust and liquid ingress protection
- | Custom firmware supports full-size Microsoft QWERTY keyboard for improved data entry
- | Versatile mounting options for any application
- | PCAP Multi-Touch supports up to 10-Point touch

VESA Mount

10.1"

PCAP

Tablets

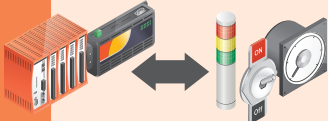
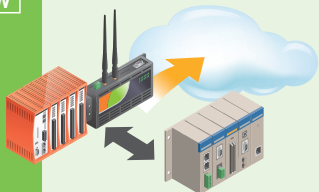
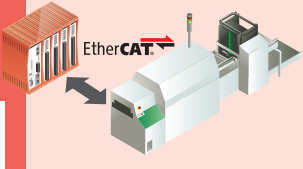
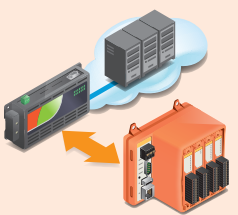
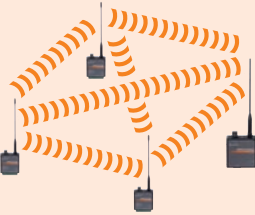

CT-RU101PC Series



Features

- | Portable 10.1" tablet PC
- | Conforms to MIL standards established by the U.S. Department of Defense MIL-STD-810G
- | IP 65 grade dust proof, drip proof performance
- | Even if there is a power outage, the battery will last for about 9 hours
- | Wi-Fi, Bluetooth, and NFC write/read standard
- | A wide range of accessories to suit your needs

10.1"	PCAP
Pentium N4200E	Windows

C O N T E N T S		
Varied Functionality of CONPROSYS		P53-
<div>Easily build an IoT environment</div> <div>M2M Controller series</div>	<div>CTR</div>  <div>This series, offers a wide range of standard-equipped application functions required for IoT devices enabling data to be collected, sent, stored and visualized using various types of sensors and control equipment.</div>	P57-
<div>Easily connect existing devices with IoT systems</div> <div>M2M Gateway series</div>	<div>GW</div>  <div>Connect multi-vendor PLCs and CNC machines to an IoT system. Supports both OPC UA and MTConnect communications making it is easier to integrate existing equipment into IoT systems.</div>	P59-
I/O Modules and Options		P61-
<div>Built in software PLC</div> <div>PAC series</div>	<div>PAC</div>  <div>This real-time controller series supports CODESYS programming compliant with international standard IEC61131-3. An EtherCAT slave unit is also available.</div>	P64-
Remote I/O		P65-
<div>Remote I/O System for IoT</div> <div>CONPROSYS nano series</div>	 <div>Remote I/O devices for digitizing interspersed local devices. CONPROSYS nano is easy to use and excellent cost performance, which accelerates digital transformation of industrial systems.</div>	P65-
<div>Sub-1GHz band Wireless</div> <div>Wireless I/O series</div>	 <div>Wirelessly communicate input voltage signals or input/output digital signals from terminals up to 1 km apart.</div>	P67-
<div>Compatible with IEC 61131-9 compliant sensors and actuators</div> <div>IO-Link Master</div>	 <div>Utilize existing field network on site. Easily connected with IO-Link sensors.</div>	P69-

Easily visualize multiple factory systems operating in multiple locations with CONPROSYS.

Examples of CONPROSYS Usage

APP 1

Supporting Process Reform in Manufacturing Industries. Initiative of Industrial 4.0

IoT-based Factories

CONPROSYS IoT devices have a built-in OPC UA server function. This makes it possible to use a SCADA system equipped with OPC UA client function to visualize the operating status of machine equipment. By making use of the open technology that complies with international standards and that is proposed by CONPROSYS, it is possible to carry out future investments in a scalable manner and with no waste such as by using MES/ERP linking to optimize supply chains and by implementing mass customization that uses the IoT.

[Functions]

Signal I/O

Data Transmission

920MHz

PLC Master

OPC UA

CNC

*Refer Pages 53 to 56

[Components]

Indicator lights, sensor inputs, CNC

PLC data usage

Storage, management and visualization of operation data

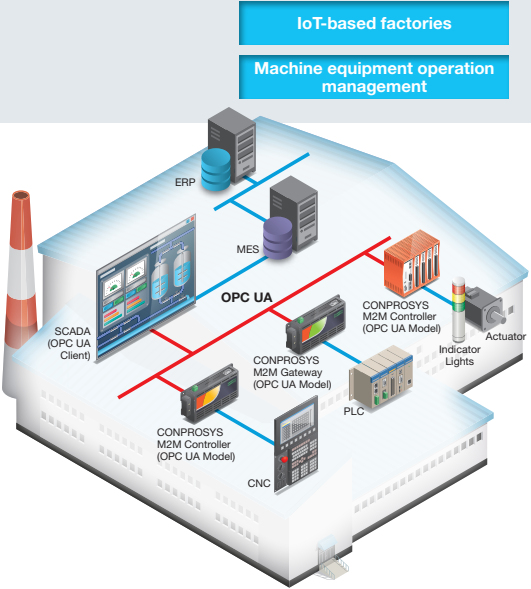
Actuators and indicator lights

→ M2M Controller (OPC UA Model)

→ M2M Gateway (OPC UA Model)

→ OPC Client (MT-LINKI, other SCADA systems)

→ M2M Controller (OPC UA Model)



IoT-based factories

Machine equipment operation management

APP 2

Add new value to your business with easy-to-deploy IoT devices

Manages Infrastructure Facilities of Multi-locations

With CONPROSYS, simple configuration is all it takes to start collecting data from communication devices—no programming required. Collected data can be linked to cloud services of other providers without having to develop a communication application.

[Functions]

Signal I/O

Data Transmission

920MHz

PLC Master

BACnet

* Refer Pages 53 to 56

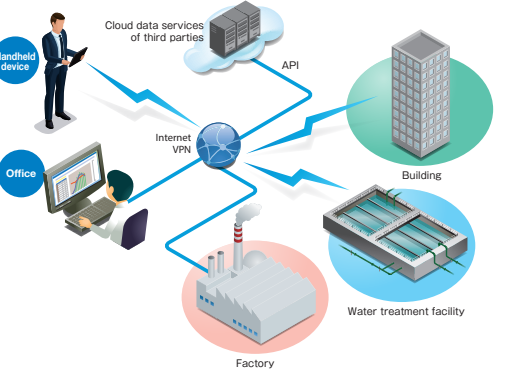
[Components]

Inputs of indicator lights and sensors

PLC data usage

→ M2M Controller

→ M2M Gateway



Manages infrastructure facilities of multi-locations

Monitors plant facilities

APP 3

CODESYS, a Sequence Control Software Using Open Technology

Forward to the Global Factories of the Next Generation

With the CONPROSYS PAC Series, it is possible to develop programs using an international-standard language that complies with IEC 61131-3. This makes it possible to apply PLC development technology to a variety of fields. The built-in web monitor function makes it possible to easily visualize data.

[Functions]

PLC Languages

HMI

OPC UA

EtherCAT

* Refer Pages 53 to 56 and Pages 64

[Components]

IEC 61131-3-compliant CODESYS

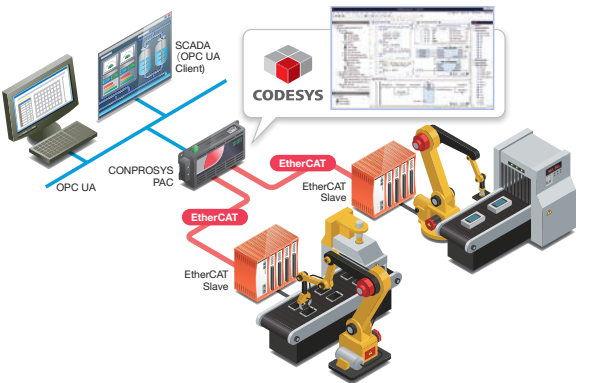
EtherCAT communication

Visualization of operating data

→ PAC series

→ EtherCAT Slave Unit

→ CONPROSYS HMI



Real-time control

Smart agriculture plant

52



Varied Functionality of CONPROSYS

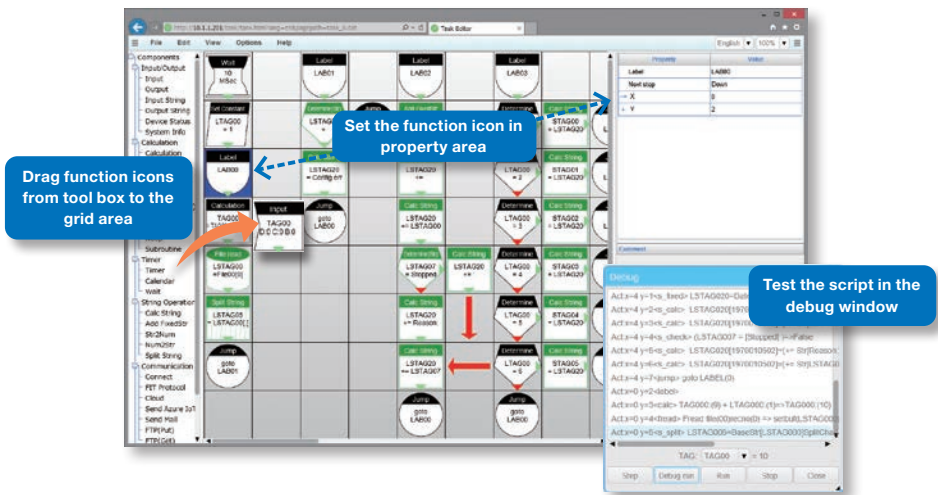
Built-in application functions that can be used to easily implement an IoT environment for collecting and storing data from sensors and controllers.
Data can be processed, controlled, and visualized with intuitive operations from a web browser.

CTR M2M Controller series GW M2M Gateway series PAC PAC series



CONPROSYS VTC (Visual Task Control)

CTR GW PAC

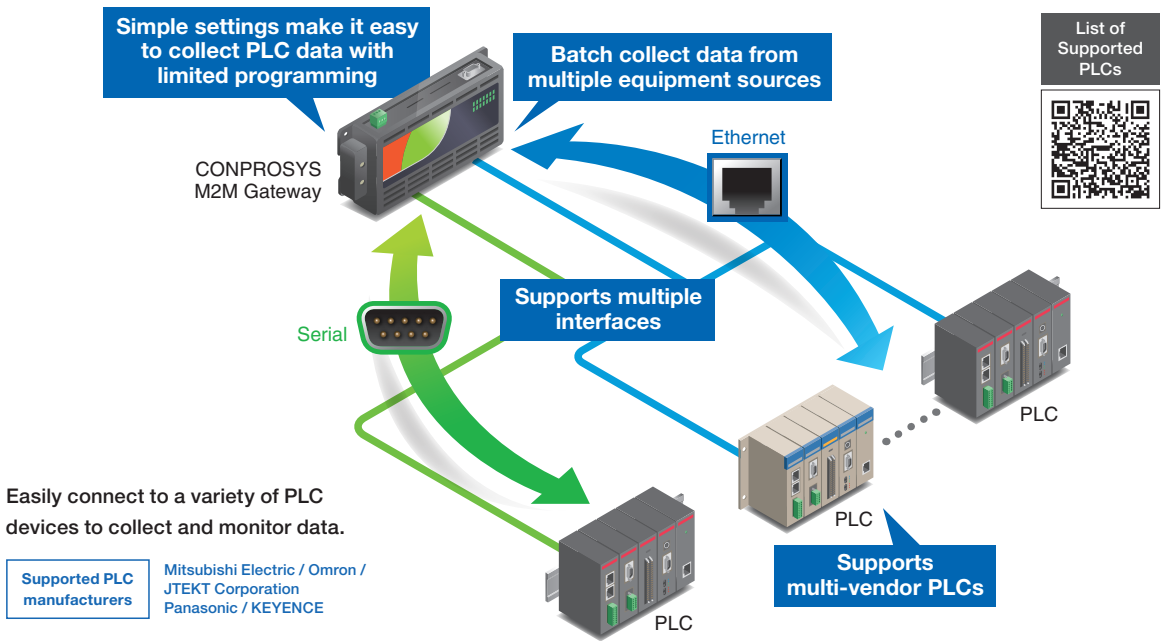


Drag function icons from the tool box to the grid area. A variety of task processing can be added with these intuitive operations. There is no need for knowledge of programming languages or for a special development environment. A variety of tasks such as device I/O, calculations, flow control, character string operations, cloud data transmission, and file operations can be set easily from a web browser in the same manner as drawing a flow chart.



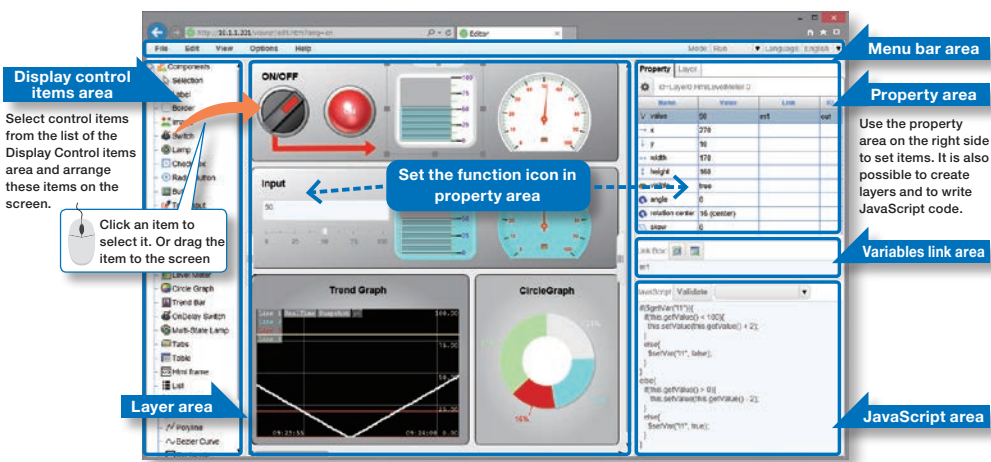
PLC Master

CTR GW PAC



CONPROSYS HMI (Human-Machine Interface)

CTR GW PAC

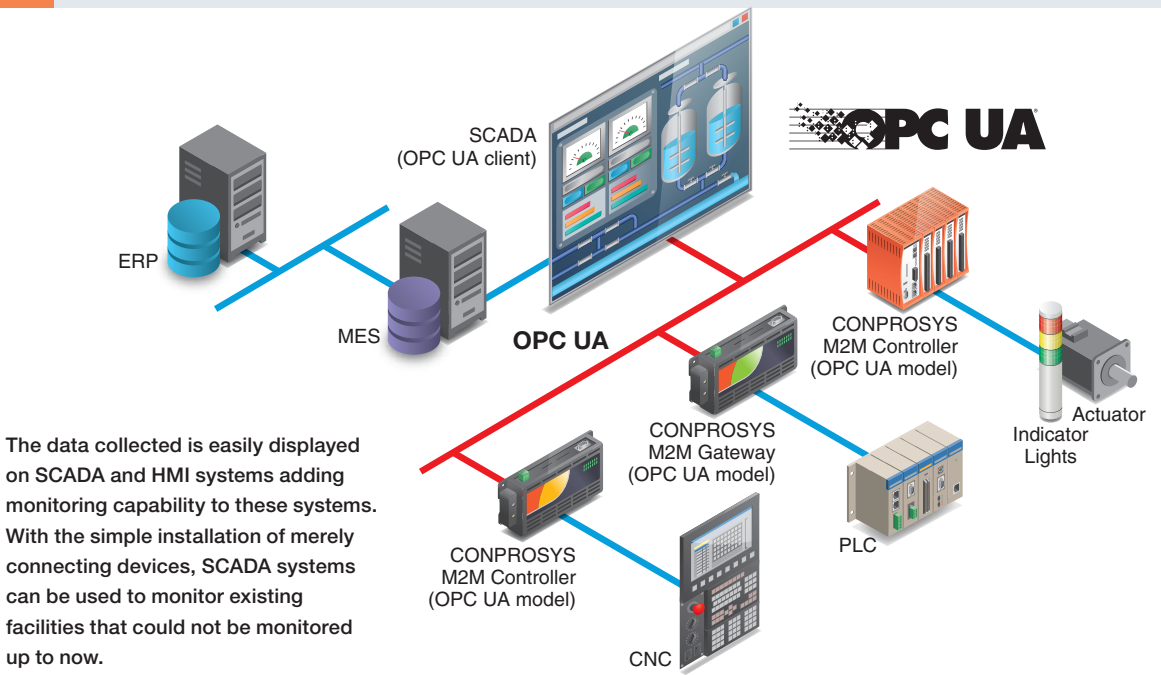


Simply arrange the prepared display components to monitor the status of the input signals. Screens can be created with a web browser. There is no need for knowledge of programming languages or for a special development environment. Just drag the prepared display components to create screens. Furthermore, the properties area window is used to configure display component settings and to set the linking of data with sensors and devices.



Supports OPC UA Standard

CTR GW PAC





Varied Functionality of CONPROSYS

Built-in application functions that can be used to easily implement an IoT environment for collecting and storing data from sensors and controllers.
Data can be processed, controlled, and visualized with intuitive operations from a web browser.

CTR M2M Controller series GW M2M Gateway series PAC PAC series

Data Capitalization

Data Transmission

CTR GW PAC

Easily transmit data over mobile wireless Internet

Supports both Internet and Mobile Wireless Internet
Data transfer is set easily by simply entering the server's address.

MTConnect

CTR GW PAC

MTConnect is a communication protocol for machine tools. It has been standardized by the MTConnect Institute.

The CONPROSYS has built-in MTConnect Adapter and Agent, which makes it possible to be used from Client software that supports MTConnect.

* The CONPROSYS signals that support MTConnect are digital inputs and outputs, analog inputs and CNC serial communication data.

Connectivity

Modbus Master

CTR GW PAC

Simple settings make it easy to collect data with limited programming

Supports multiple interfaces

Easily configure, collect, measure and monitor data with different communication devices.

BACnet Server/ Client Communication Function

CTR GW PAC

Using the BACnet object type, the information inside CONPROSYS is provided to the BACnet client.
This function makes it possible to pass information on facilities and sensors that do not support BACnet to building management systems that use BACnet.

Signal Input and Output

CTR GW PAC

CONPROSYS supports a wide range of equipment with interfaces for analog and digital signal input and output. CONPROSYS is available in integrated and configurable models. The integrated type is an all-in-one device. The configurable type offers a high degree of expandability.

Simple Router Function

CTR GW PAC

Equipped with a simple routing function.
It is possible to use a DHCP server, static routing, port forwarding and IP filtering.

Modbus Slave

CTR GW PAC

The slave responds to data requests and returns the acquired information or the results of calculations.
In the case of a write request the corresponding part of memory is changed to the specified value

Responds to the data request of host communication device which is built-in the Modbus master function and returns the acquired information, calculation results, etc.
Just several simple settings makes it possible to communicate with the host device. It can be used as a remote I/O device.

Azure IoT Hub Function

CTR GW PAC

CONPROSYS VTC can be used to implement Azure IoT devices quickly.
There is no need to develop an application for communicating with Azure.

Rich Variety of Interfaces and Excellent Lineup

M2M Controller series

The M2M Controller Series consists of two types of controllers: a stand-alone integrated type and an I/O interface expandable configurable type. The system is adaptable to a wide variety of locations, wiring methods and number of I/O channels. You can build a custom control and monitoring system to meet your specific needs.

Integrated Type



Refer pages 53 to 56 for icon definitions

The integrated type offers a wide range of models with a variety of I/O interfaces and communication protocols.



DIN rail mounted image

[Key Features]

- DIN rail or fixed mounting options available
- Embedded CPU
- Operating temperature range: -20 to 60°C (-4 to 140°F)
- Durable hardware reduces maintenance costs
- Daisy-chain connections do not required a HUB (Except some models)
- Power supply voltage: 12 to 24 VDC
- Physical dimensions: 188.0(W)x78.0(D)x30.5(H) mm (7.40"x3.07"x1.20") (does not include protrusions and antenna)

OPC UA server built-in model

CPS-MC341-ADSC1-931

OPC UA server is built-in the firmware. It can directly communicate with an Information network without a bridge PC



Configurable Type



Refer pages 53 to 56 for icon definitions

The configurable type allows users to add a variety of I/O modules to a CPU controller providing ultimate flexibility.



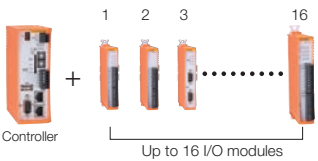
4G model



DIN rail mounted image

[Key Features]

- Capable of supporting up to 16 I/O modules on a single controller
- DIN rail mountable
- Embedded CPU
- Operating temperature range: -20 to 60°C (-4 to 140°F)
- Durable hardware reduces maintenance costs
- Daisy-chain connections do not required a HUB
- Power supply voltage: 24 VDC
- Physical dimensions: 44.7(W)x94.7(D)x124.8(H) mm (1.76"x3.83"x4.91") (does not include protrusions and antenna)



Up to 16 I/O modules

OPC UA server built-in model

CPS-MCS341-DS1-131
CPS-MCS341G5-DS1-130
CPS-MCS341Q-DS1-131



Type		Integrated Type							
Product Name		Multi I/O	Multi I/O with built-in OPC UA server and MTConnect Adapter & Agent	Multi I/O with additional RS-485	Digital I/O with RS-485	Digital I/O with RS-232C	Digital I/O with CAN	Analog I/O	Multi I/O with 920MHz LAN (Japan only)
Model		CPS-MC341-ADSC1-111	CPS-MC341-ADSC1-931	CPS-MC341-ADSC2-111	CPS-MC341-DS1-111	CPS-MC341-DS11-111	CPS-MC341-DS2-911	CPS-MC341-A1-111	CPS-MC341Q-ADSC1-111
Interfaces	LAN	2ch	2ch	2ch	2ch	2ch	2ch	2ch	2ch
	SD Card Slot	1 Slot	1 Slot	1 Slot	1 Slot	1 Slot	1 Slot	1 Slot	1 Slot
	USB	1ch	1ch	1ch	—	1ch	—	—	1ch
	Digital Input	4ch ^{*1}	4ch ^{*4}	4ch ^{*1}	8ch ^{*1}	8ch ^{*5}	8ch ^{*1}	—	4ch ^{*1}
	Digital Output	2ch	2ch	2ch	8ch	8ch	8ch	—	2ch
	Analog Input (Current)	2ch	2ch	2ch	—	—	—	—	2ch
	Analog Input (Voltage)	—	—	—	—	—	—	8ch	—
	Analog Output (Voltage)	—	—	—	—	—	—	2ch	—
	Counter	2ch ^{*2}	2ch ^{*2}	2ch ^{*2}	—	—	—	—	2ch ^{*2}
	RS-422A/485	1ch	1ch	2ch	1ch	—	1ch	—	1ch
	RS-232C	1ch	1ch	1ch	—	1ch	—	—	1ch
	CAN	—	—	—	—	—	1ch	—	—
Functions	4G SIM (Standard)	—	—	—	—	—	—	—	—
	920MHz	—	—	—	—	—	—	—	○
	Data Transmission	○	○	○	○	○	○	○	○
	OPC UA Server	—	○	—	—	—	—	—	—
	MTConnect	—	○	—	—	—	—	—	—
	Signal I/O	○	○	○	○	○	○	○	○
	Modbus Master	—	—	—	—	—	—	—	—
	Modbus Slave	○	○	○	○	○	○	○	○
	PLC Master	—	—	—	—	—	—	—	—
	HMI	○	○	○	○	○	○	○	○
	VTC	○	○	○	○	○	○	○	○
	CNC Communication	—	○	—	—	—	—	—	—
Others	Operating temperature	-20 to 60°C (-4 to 140°F)							
	Physical dimensions (WxDxH)	188.0 x 78.0 x 30.5 mm (7.40 x 3.07 x 1.20 in) (does not include protrusions and antenna)							
	Power supply voltage	12 to 24VDC							

^{*1} Opto-isolated input (supports sink output). Built-in 12VDC power. ^{*2} Counter inputs share with digital inputs. ^{*3} SIM card not included. Standard size SIM card only. Visit www.contec.com for details.
^{*4} Opto-isolated (supports sink output and current source output). Built-in 12VDC power or external 12 to 24VDC power is switchable. ^{*5} Opto-isolated (supports sink output). External 12 to 24VDC power supply is needed.
^{*6} Available only for Ethernet communication. 4G and 920Mhz wireless communication do not support this function. ^{*7} Digital outputs is exclusive with digital input.
^{*} The specifications are supported by the newest firmware drivers. Please download the newest firmware from Contec website when you need.

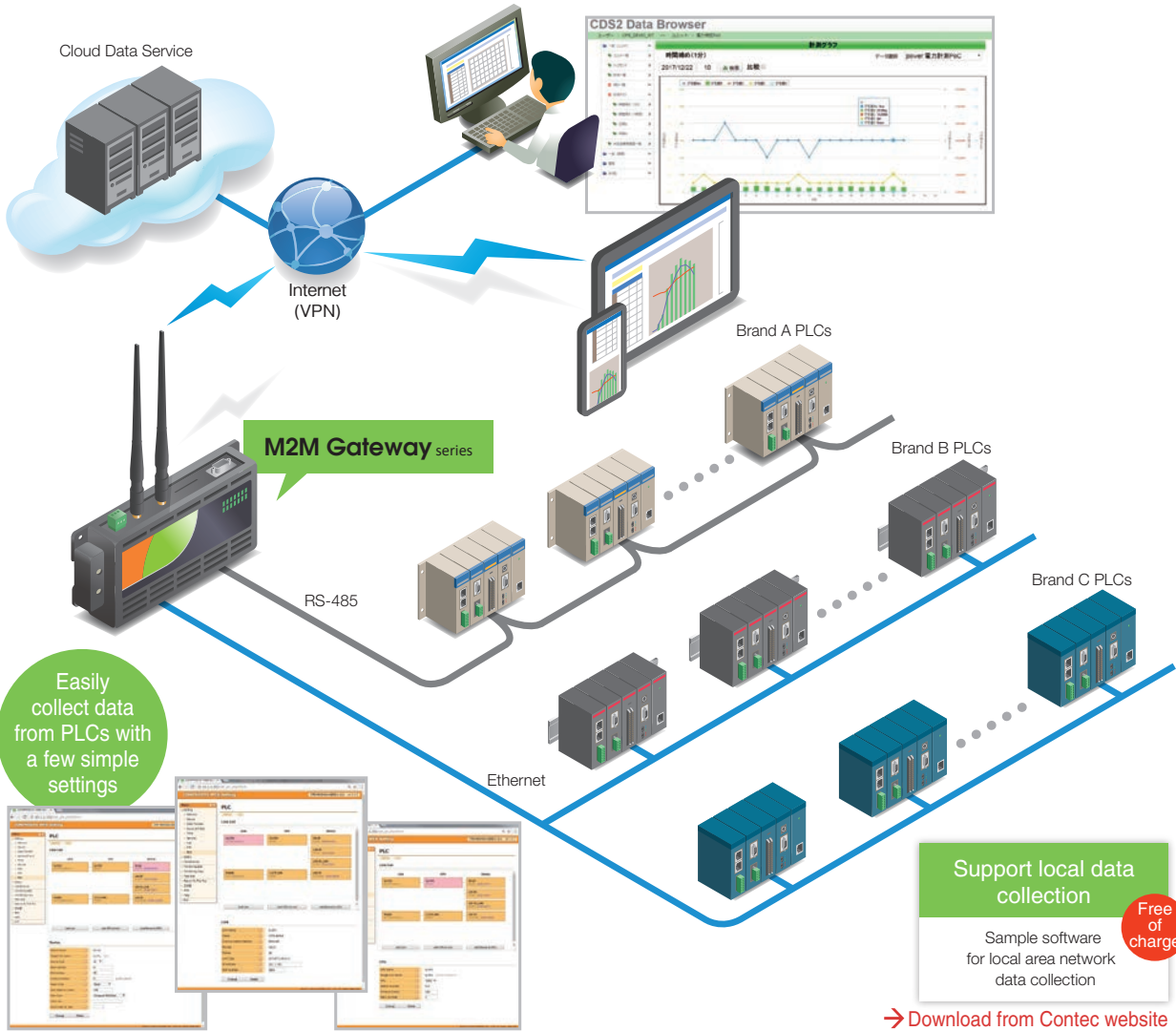
Type		Configurable Type			
Name of Product		Controller	Controller with built-in OPC UA server and MTConnect Adapter & Agent	Controller with built-in OPC UA server and MTConnect Adapter & Agent + 4G WAN ^{*3}	Controller with built-in OPC UA server and MTConnect Adapter & Agent + 920MHz LAN (Japan only)
Model		CPS-MCS341-DS1-111	CPS-MCS341-DS1-131	CPS-MCS341G5-DS1-130	CPS-MCS341Q-DS1-131
Interfaces	LAN	2ch	2ch	2ch	2ch
	SD Card Slot	1 Slot	1 Slot	1 Slot	1 Slot
	USB	1ch	1ch	1ch	1ch
	Digital Input	4ch ^{*1}	4ch ^{*1}	4ch ^{*1}	4ch ^{*1}
	Digital Output	4ch ^{*7}	4ch ^{*7}	4ch ^{*7}	4ch ^{*7}
	Analog Input (Current)	—	—	—	—
	Analog Input (Voltage)	—	—	—	—
	Analog Output (Voltage)	—	—	—	—
	Counter	—	—	—	—
	RS-422A/485	—	—	—	—
	RS-232C	1ch	1ch	1ch	1ch
	CAN	—	—	—	—
Functions	4G SIM (Standard)	—	—	1 Slot	—
	920MHz	—	—	—	○
	Data Transmission	○	○	○	○
	OPC UA Server	—	○	○ ^{*6}	○ ^{*6}
	MTConnect	—	○	○ ^{*6}	○ ^{*6}
	Signal I/O	○	○	○	○
	Modbus Master	—	—	—	—
	Modbus Slave	○	○	○	○
	PLC Master	—	—	—	—
	HMI	○	○	○	○
	VTC	○	○	○	○
	CNC Communication	—	○	○	○
Others	Operating temperature	-20 to 60°C (-4 to 140°F)			
	Physical dimensions (WxDxH)	44.7 x 94.7 x 124.8 mm (1.76 x 3.83 x 4.91 in) (does not include protrusions and antenna)			
	Power supply voltage	24VDC			

Refer pages 61 to 63 for line up of configurable type I/O modules.

Multi-vendor Compatible PLC to IoT

M2M Gateway series

A single CONPROSYS controller can collect data from multiple PLC controlled equipment.
M2M Gateway series supports devices from a variety of vendors,
including Mitsubishi's MELSEC series, Omron's Sysmac series, JTEKT's TOYOPUC series, Panasonic series and KEYENCE series.



Monitoring PLC Device Memory

- Reads data from PLC memory (I/O status, data register, link register, file register, etc.)
- Transmits collected data to the cloud through simple settings.
- It is possible to communicate with the PLC at an arbitrary timing by setting the communication attribute and using the VTC function

Link up to 10 Systems and 100 Register Groups

Supports Multiple PLC Devices and Modbus Equipment from Different Vendors

Compatible with Mitsubishi MELSEC-FX / -A / -Q / -L / IQ-F / IQ-R series, Omron Sysmac C / CPM / CS / CJ / CP series, JTEKT TOYOPUC PC10G-CPU series, Panasonic FP7 / FPΣ / FP-X / FP-X0 series / Eco-POWER METER, and KEYENCE KV-3000 / KV-5000 / KV-7000 / KV-8000 / KV Nano series. Communicates with a variety of Modbus equipment.

Please visit our website for the latest information regarding supported PLCs and Modbus devices.



Lineup

Integrated Type



Refer pages 53 to 56 for icon definitions



LAN Model
CPS-MG341-ADSC1-111
Built-in OPC UA Server Model
CPS-MG341-ADSC1-931



4G Built-in OPC UA Server Model
CPS-MG341G5-ADSC1-931

4G model

Configurable Type



Refer pages 53 to 56 for icon definitions



Built-in OPC UA Server Model
CPS-MGS341-DS1-131



4G Built-in OPC UA Server Model
CPS-MGS341G5-DS1-130

4G model

* Key features are same as integrated type M2M controller series. Refer P57 for details.





Type	Integrated Type			Configurable Type	
Name of Product	PLC data logger + Multi I/O	PLC data logger + Multi I/O with built-in OPC UA server and MTConnect Adapter & Agent	PLC data logger + Multi I/O + 4G WAN*1 with built-in OPC UA server and MTConnect Adapter & Agent	PLC data logger + Multi I/O with built-in OPC UA server and MTConnect Adapter & Agent	PLC data logger + Multi I/O + 4G WAN*1 with built-in OPC UA server and MTConnect Adapter & Agent
Model	CPS-MG341-ADSC1-111	CPS-MG341-ADSC1-931	CPS-MG341G5-ADSC1-931	CPS-MGS341-DS1-131	CPS-MGS341G5-DS1-130
Interfaces	LAN	2ch	2ch ⁴	2ch ⁴	2ch ⁴
	SD Card Slot	1 Slot	1 Slot	1 Slot	1 Slot
	USB	1ch	1ch	1ch	1ch
	Digital Input	4ch ²	4ch ⁵	4ch ²	4ch ²
	Digital Output	2ch	2ch	2ch	4ch ⁷
	Analog Input (Current)	2ch	2ch	2ch	—
	Analog Input (Voltage)	—	—	—	—
	Analog Output (Voltage)	—	—	—	—
	Counter	2ch ³	2ch ³	—	—
	RS-422A/485	1ch	1ch	—	—
	RS-232C	1ch	1ch	1ch	1ch
	CAN	—	—	—	—
	4G SIM (Standard)	—	1 Slot	—	1 Slot
	920MHz	—	—	—	—
Functions	Data Transmission	O	O	O	O
	OPC UA Server	—	O	O	O
	MTConnect	—	O ⁶	O ⁶	O ⁶
	Signal I/O	O	O	O	O
	Modbus Master	O	O	O	O
	Modbus Slave	O	O	O	O
	PLC Master	O	O	O	O
	HMI	O	O	O	O
	VTC	O	O	O	O
Others	CNC Communication	—	O	O	O
	Operating temperature	-20 to 60°C (-4 to 140°F)			44.7 x 94.7 x 124.8 mm (1.76 x 3.83 x 4.91 in) (does not include protrusions and antenna)
	Physical dimensions (WxDxH)	188.0 x 78.0 x 30.5 mm (7.40 x 3.07 x 1.20 in) (does not include protrusions and antenna)			24VDC
	Power supply voltage	12 to 24VDC			



*1 SIM card not included. Standard size SIM card only. Visit www.contec.com for details.
*2 Opto-isolated input (supports sink output). Built-in 12VDC power. *3 Counter inputs share with digital inputs.
*4 The LAN ports are independent, which makes it possible to split the network segment.
*5 Opto-isolated inputs (supports both current sink output and current source output). Built-in 12VDC power or external 12 to 24VDC power is switchable.
*6 Transmittable signals by MTConnect are the collected data through the gateway module's interfaces, and the serial communication data with the CNC.
*7 Digital outputs is exclusive with digital input.
* The specifications are supported by the newest firmware drivers. Please download the newest firmware from Contec website when you need.

I/O Modules and Options








I/O Modules


I/O interface expansion modules of the configurable type controllers and the IoT Edge controller.
24 VDC power is supplied by the controller to the attached I/O modules via the internal bus.


Analog Input and Output Modules					
Model	Input	Output	Power Consumption	Connectors	Controller series
 CPS-AI-1608LI	8ch differential input, 16bit resolution, ±10V Bus isolated	—	100mA (Max.)	Screw terminal block (3.81mm/0.15" pitch)	<div>CTR</div> <div>GW</div> <div>PAC</div>
 CPS-AI-1608ALI	8ch differential input, 16bit resolution, 0-20mA Bus isolated	—	100mA (Max.)		
 CPS-AO-1604VLI	—	4ch voltage output, 16bit resolution, ±10V Bus isolated	200mA (Max.)		
 CPS-AO-1604LI	—	4ch current output, 16bit resolution, 0-20mA Bus isolated	200mA (Max.)		

Sensor Module					
Model	Supported sensor / wiring method	No. of CH / Isolation	Power Consumption	Connectors	Controller series
 CPS-SSI-4P	Pt100 / Three-wire or four-wire	4ch sensor input Bus isolated	100mA (Max.)	Screw terminal block (3.81mm/0.15" pitch)	<div>CTR</div> <div>GW</div> <div>PAC</div>
 CPS-SSI-4C	Thermocouple input (J, K, E, N, R, S, T)	4ch bus isolated	100mA (Max.) (TBC) ^{*1}		

^{*1} Visit the Contec website for more information.

Digital Input and Output Modules					
Model	Input	Output	Power Consumption	Connectors	Controller series
 CPS-DIO-0808L	8ch opto-isolated (Compatible with current sink output)	8ch opto-isolated open-collector (Current sink type)	100mA (Max.)	Screw terminal block (3.81mm/0.15" pitch)	<div>CTR</div> <div>GW</div> <div>PAC</div>
 CPS-DIO-0808BL (Built-in 12VDC power)		8ch opto-isolated open-collector (Current sink type)	200mA (Max.)		
 CPS-DIO-0808RL	8ch opto-isolated (Compatible with current source output)	8ch opto-isolated (Current source type)	100mA (Max.)		
 CPS-DI-16L	16ch opto-isolated (Compatible with current sink output)	—	100mA (Max.)		
 CPS-DI-16RL	16ch opto-isolated (Compatible with current source output)	—	100mA (Max.)		
 CPS-DO-16L	—	16ch opto-isolated open-collector (Current sink type)	100mA (Max.)		
 CPS-DO-16RL	—	16ch opto-isolated (Current source type)	100mA (Max.)		

Relay Modules					
Model	Input	Output	Power Consumption	Connectors	Controller series
 CPS-RRY-4PCC	—	4ch relay contact output (1 pair of Form c contacts)	100mA (Max.)	Screw terminal block (5.08mm/0.20" pitch)	<div>CTR</div> <div>GW</div> <div>PAC</div>

Counter Modules					
Model	Input	Output	Power Consumption	Connectors	Controller series
 CPS-CNT-3202I	Phase A/Up 1x2ch Phase B/Down 1x2ch Phase Z/CLR 1x2ch General input 1x2ch Optocoupler isolated. Isolation between channels	Match signal output 1x2ch (Opto-isolated open-collector output)	100mA (Max.)	Screw terminal block (3.81mm/0.15" pitch)	<div>CTR</div> <div>GW</div> <div>PAC</div>

CTR





 M2M Controller series

GW


 M2M Gateway series

PAC

 PAC series

Serial Communication Modules					
Model	Transmission Scheme	No. of CH / Isolation	Power Consumption	Connectors	Controller series
 CPS-COM-1PC	RS-232C Asynchronous serial transmission	1ch bus isolated	100mA (Max.)	9-pin D-SUB connector (s)	<div>CTR</div> <div>GW</div> <div>PAC</div>
 CPS-COM-2PC		2ch bus isolated Isolation between channels	200mA (Max.)		
 CPS-COM-1PD	RS-422A/RS-485 Asynchronous serial transmission (Full duplex / half duplex)	1ch bus isolated	200mA (Max.)	Screw terminal block (3.81mm/0.15" pitch)	
 CPS-COM-2PD		2ch bus isolated Isolation between channels	200mA (Max.)		


Options

Product Name	Model	Input	Output	Physical dimensions (WxDxH)	Mount Method	Support Products
	CPS-PWD-15AW12-01	85 to 264VAC	12VDC, 1.3A (Max.)	39 x 80 x 79 mm (1.54 x 3.15 x 3.11 in) (does not include protrusions)	Mountable to a 35mm/1.38" DIN rail	Integrated type controllers
	CPS-PWD-30AW24-01		24VDC, 1.3A (Max.)	22.5 x 75 x 90 mm (0.89 x 2.95 x 3.54 in) (does not include protrusions)		Configurable type controllers
	CPS-PWD-90AW24-01		24VDC, 3.8A (Max.)	50 x 90 x 90 mm (1.97 x 3.54 x 3.54 in) (does not include protrusions)		

^{*A} DC cable and a 3-pin I/O connector are included.

^{*AC} power cable is not included. An optional AC power cable is available from Contec (IPC-ACC00E3).

Product Name	Model	Rating	Cable Length	Terminals	Support Products
AC Power Cable	IPC-ACC00E3	125VAC 7A	2m	3-pole round terminal	Power supplies

Product Name	Model	Frequency Band	Cable Length	Antenna Gain	Physical dimensions (WxDxH)	Support Products
	CPS-ANT-R5-01	800 MHz band 1.5 GHz band 1.7 GHz band 2.0 GHz band 2.5 GHz band	5m	800MHz band: 1.0dBi or smaller 1.5GHz band: 1.0dBi or smaller 1.7GHz band: 0.0dBi or smaller 2.0GHz band: 1.0dBi or smaller 2.5GHz band: 1.0dBi or smaller (Don't include cable loss)	83 x 39.6 x 160 mm (3.27 x 1.56 x 6.30 in) (Not including protrusions and cable)	4G WAN models
	CPS-ANT-R3-01	800 MHz band 920 MHz band 2.1 GHz band	3m	800 MHz band: 3.88dBi 920 MHz band: 3.02 dBi 2.1 GHz band: 3.76 dBi (Don't include cable loss)	42 x 42 x 93 mm (1.65 x 1.65 x 3.66 in) (Not including protrusions and cable)	920 MHz models 4G WAN models

Product Name	Model	Cable Length	Specification	Support Products
Connection Cable for FANUC CNC	CPS-CAB-S01-1	1m	20-pin to 9-pin conversion cable (Software flow control, one touch lock type)	OPC UA server built-in modules
	CPS-CAB-S01-3	3m		
	CPS-CAB-S01-5	5m		
Connection Cable for Mitsubishi Electric CNC	CPS-CAB-S02-1	1m	20-pin to 9-pin x 2 conversion cable (Software flow control, one touch lock type)	OPC UA server built-in modules

Product Name	Model	Number	Support Products
Magnet (for mounting)	CPS-MAG01-4	4	Integrated Type Modules

Industrial Switching HUB

100BASE-TX, 8-port Type, Wide Temperature Range

SH-8008F/SH-8008F-2

- Operating temperature from -20 to 60°C (-4 to 140°F)
- Supports 8 ports with 100BASE-TX
- Power supply redundant, power supply reverse wiring countermeasure circuit built-in
- Mountable on the 35mm DIN Rail
- Compact Size(W/D/H) 40 x 60 x 90 mm / 1.57 x 2.36 x 3.54 in



A power supply must be provided separately. We offer an AC adapter (model: POA201-10-2) (sold separately). Please check our website for details.

100BASE-TX, 5-port Type, Wide Temperature Range

CPS-HBL-8005F

- Operating temperature from -20 to 60°C (-4 to 140°F)
- Supports 5 ports with 100BASE-TX
- Power supply redundant, power supply reverse wiring countermeasure circuit built-in
- Mountable on the 35mm DIN Rail
- Compact Size(W/D/H) 25.2 x 94.7 x 124.8 mm / 0.99 x 3.73 x 4.91 in



I/O Modules and Options



An innovative IoT solution for measuring motor insulation deterioration during operation

Three-phase Motor Insulation Deterioration Monitoring Module + ZCT Sensor

CTR M2M Controller series

Model	The Measured Circuit	No. of measured circuit	Inner diameter of ZCT	Measurement voltage range	Measurement leakage current range (Resolution: 0.001 mA)	Measured insulation resistance range	Controller series
CPS-MM-LC	Overall equipment measurement (power supply mode) / Inverter output section measurement (inverter mode) AC servo amplifier output measurement (inverter mode)	1ch	Φ25mm (Φ0.98")	Phase voltage 10 VAC or more, 600 VAC or less	Overall equipment measurement: 0 to less than 1A Inverter output section measurement: 0 to less than 100 mA AC servo amplifier output measurement: 0 to less than 100 mA	Less than 1,000MΩ*	CTR

* Supports inverters and AC servo amplifiers that supply low-voltage, three-phase power. * The guaranteed accuracy range is less than 10 MΩ
* DC servo motor, and equipment that use single-phase power supply are not supported. Please contact us for large diameter ZCT of 25Φmm or more.

Modes-IO® This module also features "Modes-IO" patented technology from Tanashin Denki Co., Ltd. that can be used for measuring leakage current resistance component (I0r) from operating motors with high precision.

Eliminates the need to stop equipment for inspections

This module measures leakage current resistance components (I0r) from operating motors with high precision. It changes the maintenance work to constant monitoring and contribute to the improvement of the equipment operation rate.

Shipped with a ZCT (Φ25) sensor for up to 30kW low-voltage, three-phase motors and AC servo motors.

This module supports three-phase delta connections and three-phase Y connections. It can be applied to a wide range of devices such as pumps, compressors, A/C fans, metalworking machines, and transport equipment.

Supports devices that acts without using a PC. Supports cloud service.

This module supports M2M controllers with built-in IoT functions such as data collection, web monitoring, and cloud linking. It can also be operated without a PC.

Flexible systems can be constructed by using in combination with the various functions of M2M controller CPU modules.

Image of connected with a M2M controller

Monitoring display example using CONPROSYS HMI

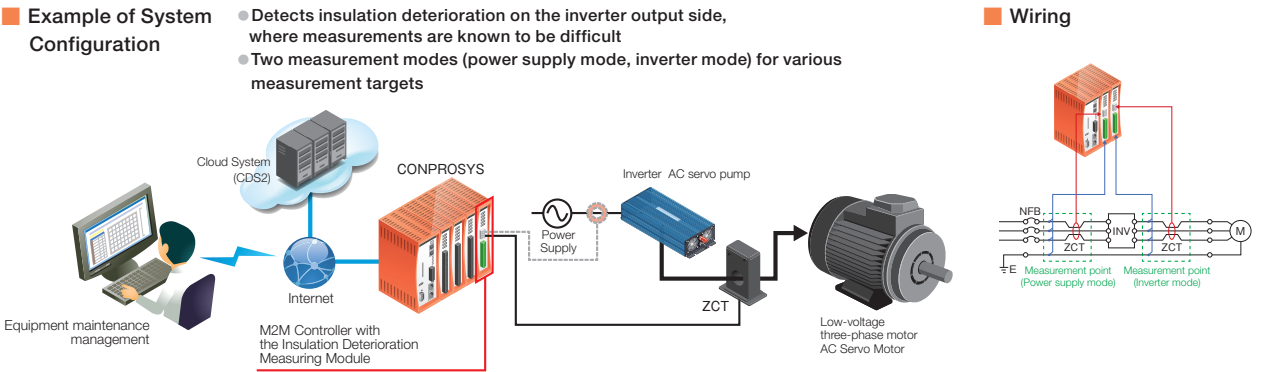
Threshold values can be changed temporarily.

Displays the insulation resistance values of the measurement results.

Displays the judgements of the threshold.

Hourly insulation resistance graph display for the day

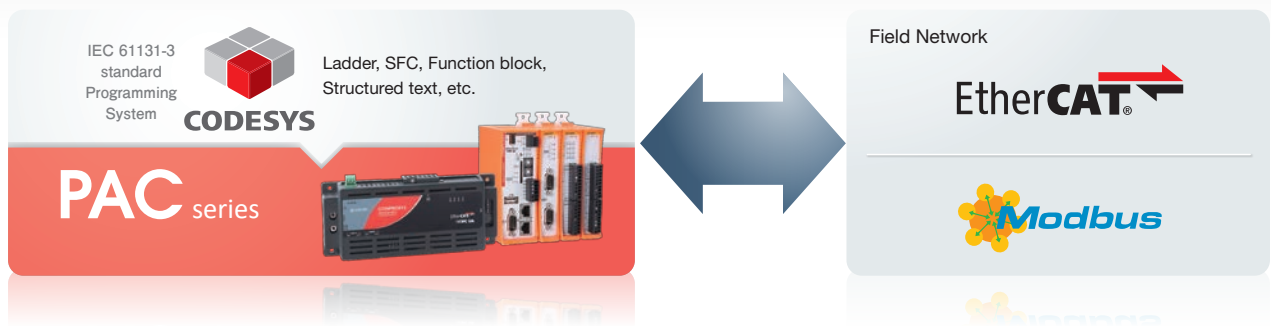
CONPROSYS HMI makes it possible to view equipment information on a Web browser without using a cloud server or similar device. This monitoring display example can be downloaded free-of-charge from the "Script sample programs" page of our company's website. Target sample software: "Sample software for three-phase motor insulation deterioration monitoring module"



Enter into the IoT Era with a Real Time Controller

IPAC series

IEC61131-3 standard CODESYS programming. Rich functionality to build an open system.



- Web monitoring function using built-in CONPROSYS HMI**
CONPROSYS PAC series includes a web server function and web screen creation software. Monitoring screens can be developed in a user friendly web browser environment. Devices can be monitored through a web browser without the use of a cloud server. No programming experience required.
- Fieldbus master function**
The built-in customized CODESYS Runtime engine supports EtherCAT / Modbus-TCP master functions. In the CODESYS integrated development environment, fieldbus I/O can be directly assigned to variables in the same manner as the built-in I/O of a PAC integrated controller and the attached I/O of a PAC configurable controller.
- Built-in OPC UA server for SCADA/MES/EPR linking**
The built-in OPC UA server provides the ability to embed the CONPROSYS. PAC series controller into a host SCADA system or other applications that support OPC UA protocol.

Lineup

Integrated Type

- EtherCAT model
CPS-PC341EC-1-9201
- Modbus model
CPS-PC341MB-ADSC1-9201

Configurable Type

- EtherCAT model
CPS-PCS341EC-DS1-1201
- Modbus model
CPS-PCS341MB-DS1-1201

Example of a controller with three I/O modules

Example of a controller with three I/O modules

*Key features are the same as the integrated type M2M controller series. Refer to page 57 for details.
*Check the datasheets of each model for its interface specification from Contec Web site.

*Key features are the same as the configurable type M2M controller series. Refer to page 58 for details.

EtherCAT Slave Unit CPS-ECS341-1-011

- EtherCAT slave unit**
EtherCAT features allow the I/O modules to be controlled from a distance. Up to 16 I/O modules can be stacked to one slave unit.
- Daisy chain connection**
Each slave unit is equipped with an input port and an output port. Up to 65,535 slave units can be connected to one master. An MDP standard supported master controller will automatically recognize and register the I/O modules that attached on this EtherCAT slave unit.



Remote I/O System for IoT

CONPROSYS nano series

Remote I/O devices for digitizing interspersed local devices.
CONPROSYS nano is easy to use and excellent cost performance, which accelerates digital transformation of industrial systems.



Best value remote I/O

Remote I/O equipment that does not compromise ease of use and narrowed down to necessary functions. Modular design realizes lean configuration with minimum required I/Os.



Programmable with IEC 61131-3 PLC languages

CODESYS runtime that supports the IEC61131-3 PLC languages has been built-in. It is possible to write a control program developed in a CODESYS development environment into the unit.


Supports Windows PC, Linux PC, or Modbus device

It can be used as a remote I/O device of equipment with Modbus master function such as Windows PC, Linux PC, and PLC.

Coupler Unit

Remote I/O 4-slot					
Model	Function	Power Supply	Physical dimensions (WxDxH)	Installation Method	Operating Temperature
 CPSN-MCB271-S1-041	Windows/Linux driver control Modbus-TCP slave	12 to 24VDC	110 x 74.8 x 95 mm (4.33 x 2.94 x 3.74 in)	35 mm DIN rail Screw	-20 to 60°C (-4 to 140°F) ^{*1}
 CPSN-MCB271-1-041	Windows/Linux driver control Modbus-TCP slave 2x LAN (HUB function)	12 to 24VDC	110 x 74.8 x 95 mm (4.33 x 2.94 x 3.74 in)	35 mm DIN rail Screw	-20 to 60°C (-4 to 140°F) ^{*1}

^{*1} The operating temperature is from -20°C to 55°C (-4°F to 131°F) when the unit is wall mounted by rolling left/right 90° or when the unit put on placed flat on the table.

Programmable Remote I/O 4-slot					
Model	Function	Power Supply	Physical dimensions (WxDxH)	Installation Method	Operating Temperature
 CPSN-PCB271-S1-041	IEC 61131-3 compliant programming Modbus-TCP master / slave	12 to 24VDC	110 x 74.8 x 95 mm (4.33 x 2.94 x 3.74 in)	35 mm DIN rail Screw	-20 to 60°C (-4 to 140°F) ^{*1}

^{*1} The operating temperature is from -20°C to 55°C (-4°F to 131°F) when the unit is wall mounted by rolling left/right 90° or when the unit put on placed flat on the table.

I/O Modules

Analog Input Modules						
Model	Input Format ^{*1}	No. of Input Channels	Voltage Input ^{*1}	Input Current ^{*2}	Power Consumption	Connector
CPSN-AI-1208LI ^{*1, *2}	Single-end input or differential input	8ch (single-end input)	±10V, ±5V, ±2.5V, 0 to 10V, 12bit, Bus isolated	±20mA 12bit, Bus isolated	1.4W	Screw terminal block (3.81mm/0.15" pitch 10-pin)
CPSN-AI-2408LI ^{*2}		4ch (differential input)	±10V, ±5V, ±2.5V, 0 to 10V, 0 to 5V 24bit, Bus isolated	±20mA, 0 to 20mA, 24bit, Bus isolated	1W	

^{*1} All input channels are assigned for the same input format and input range.

^{*2} Current input is only for differential input.

Analog Output Module							
Model	Output Format	No. of Output Channels / Isolation	Resolution	Output Range	Voltage Current Output Range	Power Consumption	Connector
CPSN-AO-1602LC	Voltage/current output	2ch / Channel isolated	16bit	±10V, ±5V, 0 to 10V, 0 to 5V	0 to 20mA	2.1W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

Sensor Module					
Model	Input Format	No. of CH/ Isolation	Supported Sensors	Power Consumption	Connector
CPSN-SSI-04C	Differential input	4ch / Bus isolated	Thermocouple J, K, E, N, R, S, T	1.1W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

I/O Modules

Digital I/O Modules				
Model	Input	Output	Power Consumption	Connector
CPSN-DI-08L	8ch Opto-coupler isolated input Supports current sink (negative logic) or source (positive logic) output	—	0.3W	Screw terminal block (3.81mm/0.15" pitch 10-pin)
CPSN-DI-08BL (Built-in power supply: 12VDC)	8ch Opto-coupler isolated input Supports current sink output (negative logic)	—	0.9W	MIL connector(20-pin)
CPSN-DI-16BCL (External power supply: 12-24VDC / Built-in power supply: 12VDC)	16ch Opto-coupler isolated input (Supports current sink (negative logic) or source (positive logic) output) with simple counter function	—	1.3W	
CPSN-DO-08L	—	8ch Opto-coupler isolated open collector output (current sink type) (negative logic)	0.4W	
CPSN-DO-08BL (Built-in power supply: 12VDC)	—	8ch Opto-coupler isolated open collector output (current sink type) (negative logic)	1.2W	
CPSN-DO-08RL	—	8ch Opto-coupler isolated output (current source output)(positive logic)	0.3W	Screw terminal block (3.81mm/0.15" pitch 10-pin)
CPSN-DO-08BRL (Built-in power supply: 12VDC)	—	8ch Opto-coupler isolated output (current source output)(positive logic)	1.2W	
CPSN-DO-16L	—	16ch Opto-coupler isolated open collector output (current sink type) (negative logic)	0.5W	
CPSN-DO-16BL (Built-in power supply: 12VDC)	—	16ch Opto-coupler isolated open collector output (current sink type) (negative logic)	0.5W	MIL connector(20-pin)
CPSN-DIO-08SL	Bi-Directional: 8ch (shared inputs and outputs) Input: Opto-coupler isolated input(supports current sink output)(negative logic) Output: Opto-coupler isolated open-collector outputs (current sink type) (negative logic)		0.3W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

Relay Modules				
Model	Input	Output	Power Consumption	Connector
CPSN-RRY-4PCA	—	4ch relay contacts (Form A) output	1.2W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

Counter Modules				
Model	Input	Output	Power Consumption	Connector
CPSN-CNT-3201I	Phase-A/UP 1ch Phase-B/DOWN 1ch Phase-Z/CLR 1ch General-purpose input signals 1ch Opto-coupler isolated input	Match signal output 1ch Opto-coupler isolated open collector output	0.4W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

Serial Communication Module				
Model	Transmission Scheme	No. of CH/ Isolation	Power Consumption	Connector
CPSN-COM-1PD	Asynchronous serial transmission (Full duplex / Half duplex)	1ch / Bus isolated	1.7W	Screw terminal block (3.81mm/0.15" pitch 10-pin)

Benefits of CONPROSYS nano series

Flexible Modular type Remote I/O

Present

- More I/O units need to be added.
- Network nodes increase system cost and make programing more complicated.

CONPROSYS nano

- Possible to add only required number of I/O channels.
- Consolidation of nodes lead to cost reduction. Easy programing.

Highly efficient programmable Remote I/O

Present

- I/O control can be stopped due to communication failure.
- Master CPU load and communication traffic are heavy.

CONPROSYS nano

- Possible to continue to control I/O even in communication failure.
- Both master CPU load and communication traffic are low.

System Configuration Examples Utilizing CONPROSYS nano series

PC-based Remote I/O System utilizing Windows PC or Linux Computer

Windows / Linux driver software are ready.
Remote I/O system can be configured by industrial PC as a master controller.

Simple Remote I/O System using a PLC as the Master Controller

Supports Modbus communication.
Remote I/O system can be configured by Modbus supported PLC as a master controller.

Sub-1GHz band Wireless

Wireless I/O series for US / EU / China

Wirelessly communicate input voltage signals or input/output digital signals from terminals up to 1 km apart.

[Key Features]

- Highly reliable mesh communication
- Supports Sub-1GHz band wireless with excellent transmission distance
- Driver library for Windows and Linux



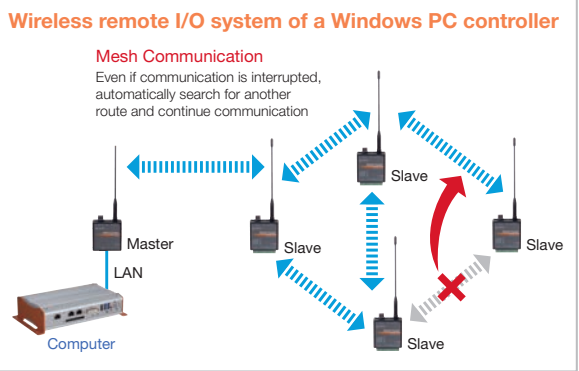
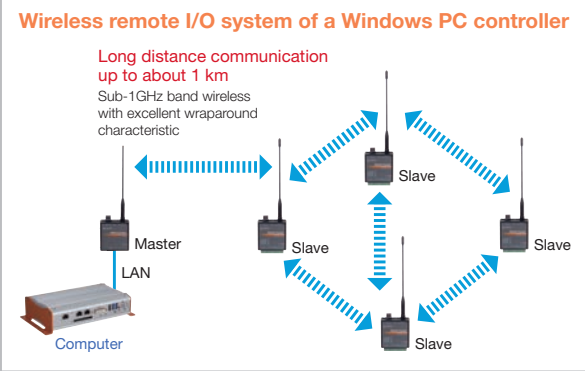
Application Example of Wireless I/O Series

Implementation image at water treatment plant

Benefits of the System

- **Ideal for monitoring targets scattered in a wide area**
Because the superior inlong distance wireless communication feature, it is suitable for installation on monitored objects scattered in a wide area.
- **Highly reliability prevents data loss**
If a communication failure occurs between a certain slave terminal and the master gateway, the system mesh communication function will make this slave terminal communicate with the master gateway via another slave terminal.
- **Easy to mount**
By using the optional bracket, the robust and compact terminal can be mounted on a DIN rail.

Network Topology



Applications and Solutions

- Airport luggage conveyor control system
- Distributed signal monitoring system in factory with wide site
- Temperature monitoring system for a wide warehouse where layouts of stored products are changed frequently
- Monitoring system which can use Sub-1GHz band wireless to ensure of the communication channels if there is too much WiFi (2.4 GHz) wireless signal sources
- Tank level monitoring system

Product Lineup

Product name	Model	Region / Standard	Functions
Sub-1GHz band Wireless Ethernet Gateway	GW1-ETH-WQ-EU, -CN	EU / CE	<ul style="list-style-type: none">• Wireless I/O master terminal• Ethernet - Sub-1GHz wireless communication conversion
	GW1-ETH-WQ-US	US / FCC	
Sub-1GHz band Wireless Isolated Digital I/O Terminal	DIO-0404LY-WQ-EU	EU / CE	<ul style="list-style-type: none">• Wireless I/O slave terminal• Photocoupler isolated inputs: 4• Photocoupler isolated open-collector outputs: 4
	DIO-0404LY-WQ-US	US / FCC	
Sub-1GHz band Wireless 4-channel Analog Input Terminal	AI-1004LY-WQ-EU	EU / CE	<ul style="list-style-type: none">• Wireless I/O slave terminal• 10-bit, 4-channel, ±10V analog input
	AI-1004LY-WQ-US	US / FCC	
Mounting Bracket	BRK-WQ-Y	-	<ul style="list-style-type: none">• Bracket for DIN rail mounting
AC Adapter	POA201-10-2	CE, FCC, UL/c-UL, PSE	<ul style="list-style-type: none">• Input: 90 to 264 VAC, output: 12 VDC 1A

* The photographs used in this paper are GW1-ETH-WQ-US, AI-1004LY-WQ-US, or DIO-0404LY-WQ-US respectively.
* There are also Sub-1GHz band wireless products for Japan market.

Main Features of the Wireless I/O Series

- Highly reliable Mesh communication, AES-encrypted data communication
- Supports ambient temperatures from -20°C to 60°C
- Compact design (62.0(W) x 64.0(D) x 24.0(H)mm, No projection and antenna included)
- Can be installed on a DIN rail with the optional DIN rail mounting bracket
- Driver available for Windows (free download from CONTEC website) and Linux (available soon)
- A gateway (master) can connect with up to 128 I/O terminals (slave)

Models Usable in Overseas Markets



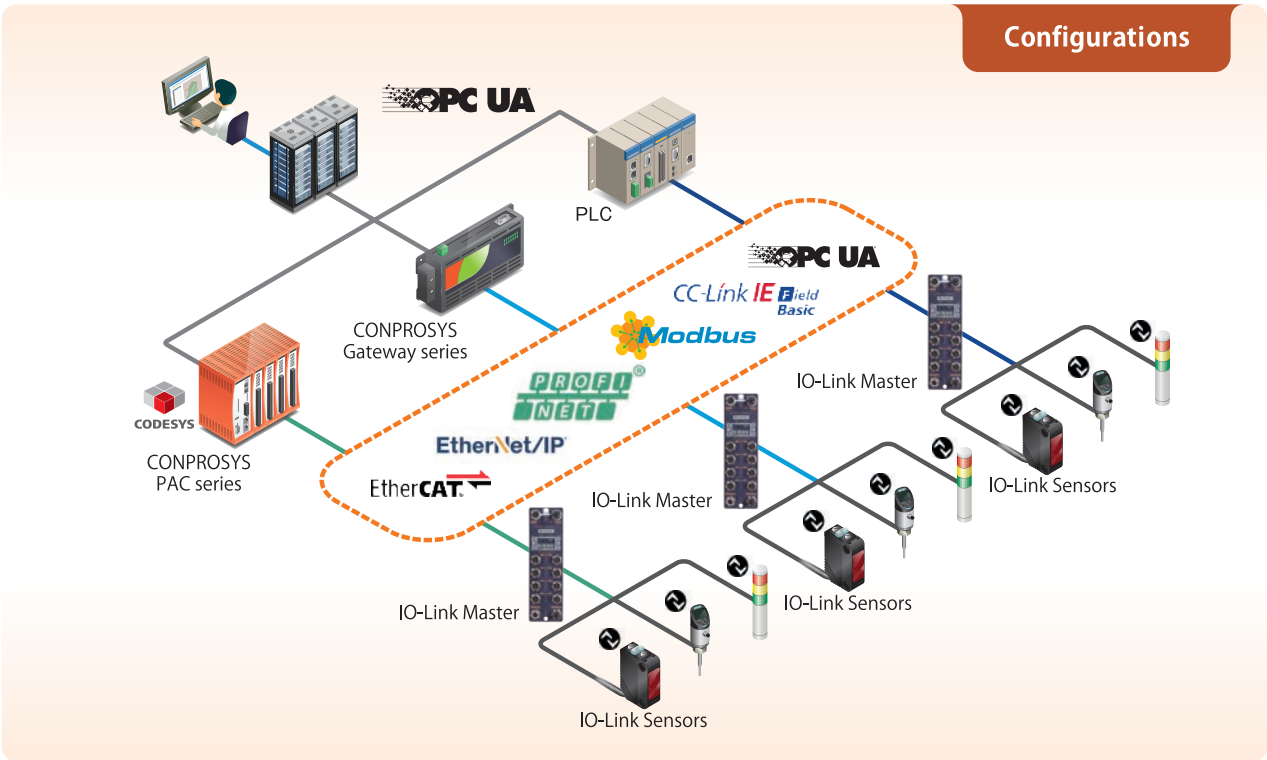
Compatible with IEC 61131-9 compliant sensors and actuators

CONPROSYS IO-Link Master

Utilize existing field network on site.
Easily connected with IO-Link sensors!

[Key Features]

- Supports multiple Field Bus Protocols
- 8-channel Independent IO-Link Ports
- IP67 dust-proof, drip-proof design
- Easy to set via web browser



Advantage of IO-Link

IO-Link is a global standard communication protocol to connect with sensors / actuators, defined as IEC 61131-9. It is expected as an open network standard at the sensor level that contributes to reducing manufacturing downtime.

- POINT 1

Possible to connect sensors from various manufacturers only with one cable
- POINT 2

Possible to capture diagnosis information such as cable disconnections or device operating status
- POINT 3

Enables error free device replacement, and quick restart
- POINT 4

High compatibility with field networks

Ordering Information

CPSL-08P1EN
CONPROSYS IO-Link Master (IO-Link port (Class A) 8ch, 2x LAN port)

Specifications

Item		Specifications	Item		Specifications
LAN	Transmission standard	100BASE-TX	Power input *4*5	Rate input voltage (current)	US : 24VDC (1.8A) UA : 24VDC (0.1A)
	Data rate	10/100Mbps		Max. input current	US : 12A UA : 12A
	The number of ports	2			Input voltage range
	Connector	M12(D-coded, Female, 4-pin)		Device current consumption	
	LED	ACT(Orange), LINK(Green)			Connector
	Support protocols	PROFINET(V2.33) EtherCAT CC-Link IE Field Basic EtherNet/IP(CT16) Modbus-TCP OPC UA		Power output *4	Output voltage *6
IO-Link		Transmission scheme			IO-Link protocol (Ver.1.0/Ver.1.1)
	The number of ports	8	Connector		M12(L-coded, female, 5(4+FE)pin)
	Connector	M12(A-coded, Female, 5-pin)*1			Physical dimensions (W/D/H)
	Communication speed	COM1: 4.8kbp, COM2: 38.4kbp, COM3: 230.4kbp	Weight	600g/1.32lb	
	Port class	Type A		Protective function	
	Rated voltage	24VDC (typ.)	Installation method		Installation with screws *9
	Max. load current	200mA/port *2			
	Isolation specification	Non-isolated			
	LED	A(Orange),ST(Green/Red), B(Orange)			
IO-Link (in SIO(DI) mode)	Input type	Current source output (PNP output) support	<div>*1 Connector pin 5 is left unconnected.</div> <div>*2 The total current of the C/Q, L+ line in all ports should be less than 1.6A.</div> <div>*3 Data 0 corresponds to Low level and Data 1 corresponds to High level.</div> <div>*4 Use power cable within 3meters.</div> <div>*5 UA power is unavailable with this product. It is not necessary to supply power to UA when you only use the device on its own.</div> <div>*6 The voltage input to the power input terminal is output as it is, but if the current from the output terminal is large, a voltage drop may occur due to the internal resistance.</div> <div>*7 The total current from the power output current, device consumption current, and output current to the IO-Link port should be supplied to the power supply input terminal.</div> <div>*8 Do not use this product immersed in water.</div> <div>*9 The commercial screws are required individually.</div>		
	Rated voltage	24VDC (typ.)			
	Input current	5mA (typ.)			
	ON/OFF voltage	15VDC min. / 5VDC max. *3			
IO-Link (in SIO(DI) mode)	Output type	Push-pull output *3			
	Rated voltage	24VDC (typ.)			
	Output current	200mA/port *2			
	Output resistance	3Ω max.			
IO-Link (Digital inputs for pin 2)	Input type	Current source output (PNP output) support			
	Rated voltage	24VDC (typ.)			
	Input current	2mA (typ.)			
	ON/OFF voltage	15VDC min. / 5VDC max. *3			
LED		ST(Green/Red), BF/NS/ERR(Green/Red), SF/MS/RUN(Green/Red), SYS(Green, Orange)			
Switch		Mode setting switch, Address setting selection switch, Address setting switch×2, Protocol setting switch			

*1 Connector pin 5 is left unconnected.
*2 The total current of the C/Q, L+ line in all ports should be less than 1.6A.
*3 Data 0 corresponds to Low level and Data 1 corresponds to High level.
*4 Use power cable within 3meters.
*5 UA power is unavailable with this product. It is not necessary to supply power to UA when you only use the device on its own.
*6 The voltage input to the power input terminal is output as it is, but if the current from the output terminal is large, a voltage drop may occur due to the internal resistance.
*7 The total current from the power output current, device consumption current, and output current to the IO-Link port should be supplied to the power supply input terminal.
*8 Do not use this product immersed in water.
*9 The commercial screws are required individually.

Controller with CODESYS

Raspberry Pi All-in-One PLC
with CODESYS®



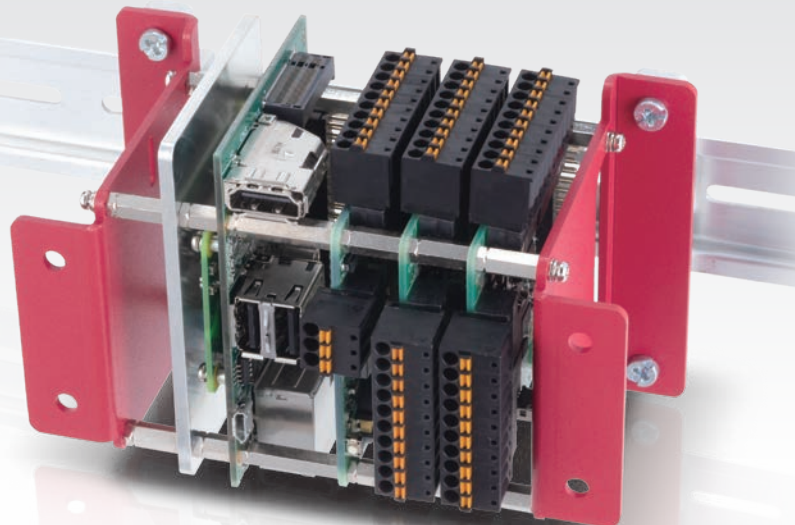
* Raspberry Pi is a trademark of Raspberry Pi Ltd.

Model with preinstalled
CODESYS® software PLC

CPI-PS10CM4

Raspberry Pi OS Model

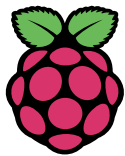
CPI-MS10CM4



Shown with HAT-size cards and DIN Rail Mount Kit

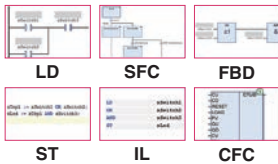
High compatibility with
Raspberry Pi 4

Raspberry Pi has shipped more than 60 million computers worldwide. This product achieves high compatibility with Raspberry Pi 4 using an embedded CM4 module. It is industrial grade, meeting requirements for RAS/RTC expansion, reliability, environmental resistance and long-term use.



Preinstalled CODESYS®

Model CPI-PS10CM4 is preinstalled with CODESYS software PLC, used by more than 400 companies worldwide with over one million deployments each year. Allows programming in six IEC61131-3-compliant languages.
*CPI-PS10CM4 only



I/O expansion with
HAT-size cards

A local bus makes I/O expansion easy. Our extensive HAT-size card range includes digital I/O, analog I/O and counter cards.

Our HAT-size card
lineup is growing!



Industrial open networks
supported

Extensive industrial network communication functionality supporting EtherCAT, PROFINET, EtherNet/IP and Modbus. Built-in OPC UA server and Web HMI functionality. (SoftMotion is optional.)
*CPI-PS10CM4 only

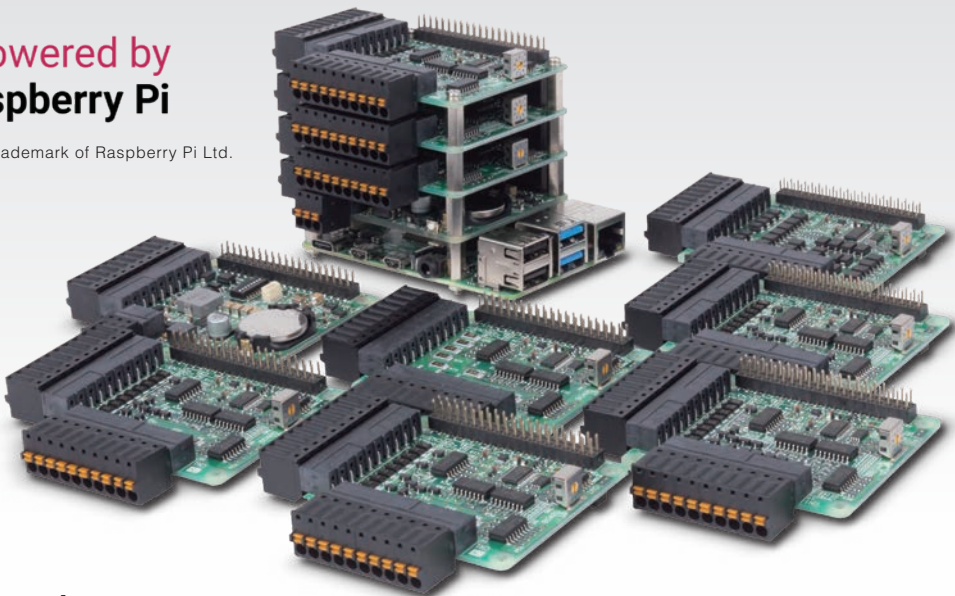


HAT Size I/O Cards

Raspberry Pi®
HAT Size **CPI** Series



* Raspberry Pi is a trademark of Raspberry Pi Ltd.



I/O Cards

Ordering Information

Model	Function Specifications
CPI-RAS	Support for a wide range of power supply inputs (8 to 28 VDC), 5 VDC internal power supply 5 VDC external power supply output (with ON/OFF control), RTC (real-time clock) WDT (watchdog timer), Hardware monitor (CPU temperature / power supply voltage) LED lighting control (green/red), General digital I/O
CPI-DIO-0808L	Isolated digital inputs 8ch and isolated digital outputs 8ch
CPI-DIO-0808RL	Isolated digital inputs 8ch (negative-common) and isolated digital outputs 8ch (negative-common)
CPI-DI-16L	Isolated digital inputs 16ch
CPI-DO-16L	Isolated digital outputs 16ch
CPI-DO-16RL	Isolated digital outputs 16ch (negative-common)
CPI-RRY-16	Semiconductor relay outputs 16ch
CPI-AI-1208LI	Isolated analog input 12-bit 8ch (Differential 4ch), Voltage input / Current input
CPI-AO-1602LC	Isolated analog output 16-bit 2ch, Voltage output / Current output
CPI-CNT-3201I	Optocoupler isolated input 32-bit up/down counter 1 ch, Single phase input/Two-phase input (A/B/Z)

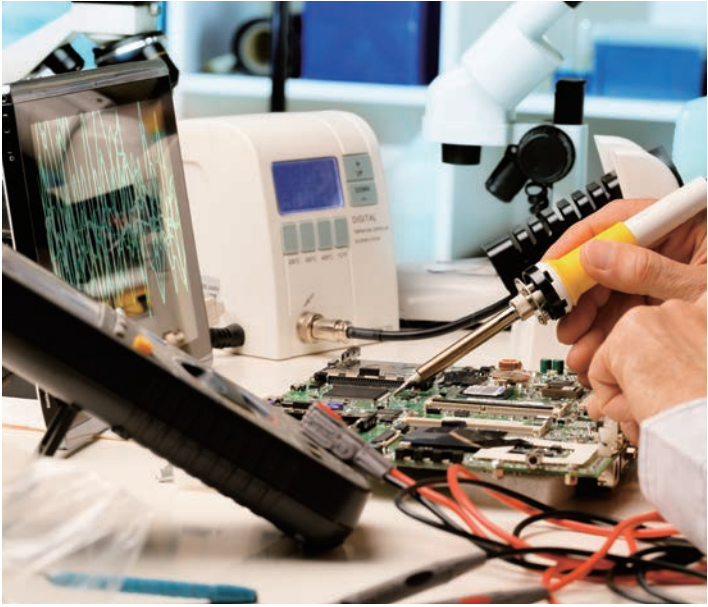
Options

Product Name	Model type	Description
Embedded power supply that can be mounted on a DIN rail	CPS-PWD-30AW24-01	Embedded power supply 30W (Input:100 to 240VDC, Output:24VDC 1.3A)
	CPS-PWD-90AW24-01	Embedded power supply 90W (Input:100 to 240VDC, Output:24VDC 3.8A)
DIN rail mounting kit	CPI-DIN01	Simple mounting onto DIN rails. Wall mounting and desktop installation are also supported.

Data Acquisition, Measurement and Control

Offering Multi-Faceted I/O Product Lineup to Meet Your Needs

Contec's extensive I/O product line offers more than 400 custom designed, developed & manufactured boards. Utilized the fields of manufacturing, measurement and control; these products are essential for testing, automated examination instrumentation, and research and development.



USB

USB Module

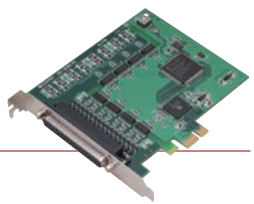
This product features "USB (Universal Serial Bus)," a serial bus standard to connect peripheral devices to computer. Various functions can be added to PC with USB connector port.



PCI Express

PCI Express Card

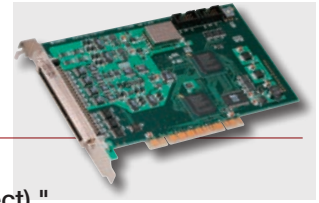
This product features serial transfer bus architecture "PCI Express," which is successor of PCI bus. Various functions can be added to PC with PCI Express bus expansion slot.



PCI

PCI Card

This product features "PCI (Peripheral Component Interconnect)," an industry standard bus architecture that communicates through PC and peripherals. Various functions can be added to PC with PCI bus expansion slot.



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Counters	P.79
Motion Controllers	P.79
Serial Communications	P.80
GPIO Communications	P.81
Software	P.83
Cables	P.85

Analog I/O

Interface modules that convert analog signals into digital data.
The ability to convert analog signals to data (digital signals) and feed them to a computer allows the user to measure external events.
Conversely, converting computer data to analog signals for output allows the user to control external devices.

	Analog Input			Analog Output			Digital I/O		Counter	Model
	Resolution	Channels	Speed	Resolution	Channels	Speed	Resolution	Channels	Counters	
USB	16 bit	32 ch	2 μ sec/ch	16 bit	2 ch	10 μ sec	8 ch	2 ch	On-board Memory	AIO-163202FX-USB
	12 bit	8 ch	5 μ sec/ch	12 bit	2 ch	12 μ sec	Bi-directional 16 ch	1 ch	On-board Memory	AIO-120802LN-USB
	16 bit	16 ch	2 μ sec/ch						On-board Memory	AIO-121602LN-USB
	16 bit	64 ch	10 μ sec/ch						On-board Memory	AI-1664LAX-USB
				16 bit	4 ch	10 μ sec		1 ch	On-board Memory	AO-1604LX-USB
				16 bit	2 ch	10 μ sec			On-board Memory	AIO-160802GY-USB
	16 bit	8 ch	4 μ sec/ch						On-board Memory	AI-1608GY-USB
			10 μ sec/ch	16 bit	2 ch	10 μ sec			On-board Memory	AIO-160802AY-USB
									On-board Memory	AI-1608AY-USB
			20 μ sec/ch						Bus Isolated On-board Memory	AI-1608VIN-USB
PCI Express				16 bit	4 ch	10 μ sec			Bus Isolated On-board Memory	AI-1608AIN-USB
				16 bit	4 ch	20 μ sec			Bus Isolated On-board Memory	AO-1604VIN-USB
									Bus Isolated On-board Memory	AO-1604AIN-USB
	16 bit	32 ch	1 μ sec/ch				Bi-directional 16 ch	2 ch	Bus Master On-board Memory	AIO-163202UG-PE
			10 μ sec/ch	16 bit	2 ch				Bus Master On-board Memory	AIO-163202G-PE
			2 μ sec/ch				8 ch		Bus Master On-board Memory	AIO-163202F-PE
	16 bit	16 ch	1 μ sec/ch	16 bit	1 ch	10 μ sec			On-board Memory	AIO-161601UE3-PE
			10 μ sec/ch						On-board Memory	AIO-161601E3-PE
		8 ch		16 bit	2 ch				Bus Isolated On-board Memory	AIO-160802LI-PE
							4 ch	1 ch	Bus Master On-board Memory	AI-1664UG-PE
		64 ch	1 μ sec/ch						Bus Isolated On-board Memory	AI-1616LI-PE
		16 ch	10 μ sec/ch						Bus Master On-board Memory	AI-1204Z-PE
		4 ch	100nsec						Bus Master On-board Memory	AIO-123202UG-PE
	12 bit	32 ch	1 μ sec/ch	12 bit	2 ch	6 μ sec	Bi-directional 16 ch	2 ch	Bus Master On-board Memory	AIO-123202G-PE
			10 μ sec/ch						On-board Memory	AIO-121601E3-PE
		16 ch	1 μ sec/ch						On-board Memory	AIO-121601UE3-PE
				16 bit	4 ch	10 μ sec			Bus Isolated On-board Memory	AO-1604LI-PE
				16 bit	2 ch	10 μ sec			On-board Memory	AIO-160802L-LPE
Low Profile	16 bit	8 ch							On-board Memory	AI-1616L-LPE
		16 ch	10 μ sec/ch						On-board Memory	AI-1664LA-LPE
									On-board Memory	AO-1604L-LPE
				16 bit	4 ch	10 μ sec			On-board Memory	AO-1616L-LPE
				16 bit	16 ch	10 μ sec			On-board Memory	AO-1608L-LPE





	Analog Input			Analog Output			Digital I/O		Counter	Model
	Resolution	Channels	Speed	Resolution	Channels	Speed	Resolution	Channels	Counters	
PCI	10 bit	2 ch	10nsec						On-board Memory	DIG-100M1002-PCI
	16 bit	32 ch	2 μ sec/ch	16 bit	2 ch		8 ch	2 ch	Bus Master On-board Memory	ADA16-32/2(PCI)F
			10 μ sec/ch	16 bit	1 ch	10 μ sec	4 ch		On-board Memory	AD16-16(PCI)EV
			1 μ sec/ch						On-board Memory	AD16-16U(PCI)EV
									Individual Isolated	AI-1604CI2-PCI
		4 ch	20 μ sec/ch						Bus Master On-board Memory	AI-1204Z-PCI
			100 nsec						On-board Memory	AD12-16U(PCI)EV
	12 bit	16 ch	1 μ sec/ch	12 bit	1 ch	6 μ sec			On-board Memory	AD12-16(PCI)EV
			10 μ sec/ch				4 ch			AD12-16(PCI)
		64 ch								AD12-64(PCI)
		16 ch	20 μ sec/ch						Bus Isolated On-board Memory	AI-1216I2-PCI
	5 1/2 digit	2 ch	0.67 msec						On-board Memory	DMM-552-PCI
					16 ch					DA12-16(PCI)
				12 bit	8 ch	10 μ sec				DA12-8(PCI)
					4 ch					DA12-4(PCI)
						20 μ sec			Individual Isolated	AO-1604CI3-PCI
				16 bit	2 ch	10 μ sec			On-board Memory	ADA16-8/2(LPCI)L
		8 ch							Bus Isolated On-board Memory	ADA16-8/2(LPCI)L
Low Profile	16 bit	64 ch	10 μ sec/ch						On-board Memory	AD16-64(LPCI)LA
									On-board Memory	AD16-16(LPCI)L
		16 ch							Bus Isolated On-board Memory	ADI16-16(LPCI)L
							4 ch	1 ch	On-board Memory	DA16-16(LPCI)L
					16 ch				On-board Memory	DA16-8(LPCI)L
				16 bit	8 ch	10 μ sec			On-board Memory	DA16-4(LPCI)L
					4 ch				On-board Memory	DAI16-4(LPCI)L
									Bus Isolated On-board Memory	DAI16-4(LPCI)L

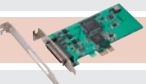

Digital I/O

Interface boards that provide computers with digital signal I/O functions. They monitor the status (ON/OFF) of relays, operating switches and measurement devices as well as controlling (ON/OFF) lamps, 7-segment display units and relays. These boards can also be used as an interface for conducting digital communication with controllers such as PLC or microcomputers.

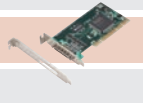
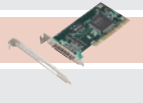
I/O Channels

Input nnn	Maximum number of input channels (bits) nnn = 8, 16, 32, 64 or 128	Output mmm	Maximum number of output channels (bits) mmm = 8, 16, 32, 64 or 128
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						Model
USB		12 to 24 VDC	Optocoupler isolation	I/O	Digital Filter	DIO-0808LY-USB
		24 to 48 VDC		I/O	Built-in Power, Digital Filter, Interrupt input edge selection	DIO-nnnmmLX-USB
		12 to 24 VDC		I/O	High Voltage, Digital Filter, Interrupt input edge selection	DIO-1616HX-USB
		Input 12 to 24 VDC, Output to 120 VAC/DC		I/O	Non Polarity, Digital Filter, Interrupt input edge selection	DIO-1616HN-USB
		to 125 VDC, to 30 VDC	Relay contact	Output	High Voltage	DIO-1616RYX-USB
		Input 12 to 24 VDC, Output 240 VAC/28 VDC		Output	High Voltage	RRY-16CX-USB
		5 VDC-TTL		I/O	Digital Filter	DIO-0808RN-USB
		3.3 VDC-LVTTL		I/O	Digital Filter	DI-16TY-USB
		24VDC	Non-Isolated	Input		DO-16TY-USB
		3.3 VDC-LVTTL		Output		DIO-0808TY-USB
		24VDC		I/O	Digital Filter	DIO-48DX-USB
		24VDC		Bi-direct		DIO-24DY-USB
PCI Express		12 to 24 VDC	Optocoupler isolation	Input	Digital Filter, Interrupt input edge selection	DIO-128SLX-USB
		12 to 24 VDC		Input	Built-in Power, Digital Filter, Interrupt input edge selection	DI-nnnL-PE
		12 to 24 VDC		Output	Built-in Power, Digital Filter, Interrupt input edge selection	DI-32B-PE
		12 to 24 VDC		Output	Built-in Power, Digital Filter, Interrupt input edge selection	DO-mmmL-PE
		12 to 24 VDC		Output	Built-in Power, Digital Filter, Interrupt input edge selection	DO-32B-PE
		12 to 24 VDC		I/O	Hi-Speed Optocoupler, Digital Filter, Interrupt input edge selection	DIO-3232F-PE
		12 to 24 VDC		I/O	Built-in Power, Digital Filter, Interrupt input edge selection	DIO-nnnmmB-PE
		12 to 24 VDC		I/O	Digital Filter, Interrupt input edge selection	DIO-nnnmmL-PE
		12 to 24 VDC		I/O	Negative Common, Digital Filter, Interrupt input edge selection	DIO-nnnmmRL-PE
		12 to 24 VDC		I/O	Digital Filter, Interrupt input edge selection	DIO-0808LY-USB




												Model
PCI Express		Low Profile	12 to 24 VDC	Optocoupler Isolation	I/O	Built-in Power	Digital Filter	Interrupt input edge selection	DIO-1616L-LPE			
			24 to 48 VDC			Built-in Power	Digital Filter	Interrupt input edge selection	DIO-1616B-LPE			
			to 125 VAC, to 30 VDC			Built-in Power	Digital Filter	Interrupt input edge selection	DIO-1616E-LPE			
			to 100 VAC/DC			High Voltage	Digital Filter	Interrupt input edge selection	DIO-nnnmmH-PE			
		Input 12 to 48 VDC, Output to 120 VAC/DC	Relay Contact	Output	High Voltage	RRY-16C-PE						
					High Voltage	RRY-32-PE						
		5 VDC-TTL	Optocoupler Isolation and Relay Contact	I/O	Non Polarity	Digital Filter	Interrupt input edge selection	DIO-1616RY-PE				
			Optocoupler isolation		Built-in Power	Digital Filter	Interrupt input edge selection	DIO-1616TB-PE				
			Non-Isolated		Digital Filter	Interrupt input edge selection	DIO-nnnmmT-PE					
					Bi-direct	Digital Filter	DIO-48D-PE					
	Input				Digital Filter	DI-32T-PE						
	Output				DO-32T-PE							
	Low Profile	3.3 VDC-LVTTL	Non-Isolated	I/O	Digital Filter	Interrupt input edge selection	DIO-1616T-LPE					
				Bi-direct	Digital Filter	Interrupt input edge selection	DIO-48D-LPE					
					Digital Filter	Interrupt input edge selection	DIO-96D-LPE					
				Signal Pattern Detection and Generator	Bus Master	DIO-32DM3-PE						
	PCI		12 to 24 VDC	Optocoupler isolation	Input	Digital Filter	Interrupt input edge selection	PI-nnnL(PCI)H				
						Built-in Power	Digital Filter	Interrupt input edge selection	PI-32B(PCI)H			
					Output	PO-mmmL(PCI)H						
Built-in Power						PO-32B(PCI)H						
I/O					Digital Filter	Interrupt input edge selection	PIO-nn/mmL(PCI)H					
					Built-in Power	Digital Filter	Interrupt input edge selection	PIO-nn/mmB(PCI)H				
			High Voltage	Digital Filter	Interrupt input edge selection	PIO-32/32H(PCI)H						
			Hi-Speed Optocoupler	Digital Filter	Interrupt input edge selection	PIO-32/32F(PCI)H						
12 to 24 VDC			Optocoupler isolation	Negative Common	Digital Filter	Interrupt input edge selection	PIO-nn/mmRL(PCI)H					
				Relay Contact	Output	High Voltage	Non Polarity	RRY-16C(PCI)H				
						High Voltage	Non Polarity	RRY-32(PCI)H				
to 125 VAC to 30 VDC			Optocoupler Isolation and Relay Contact	I/O	Non Polarity	Digital Filter	Interrupt input edge selection	PIO-16/16RY(PCI)				
to 100 VAC/DC			Optocoupler isolation	I/O	Built-in Power	Digital Filter	Interrupt input edge selection	PIO-16/16TB(PCI)H				
Input 12 to 48 VDC Output to 120 VAC/DC					Digital Filter	Interrupt input edge selection	DIO-6464T2-PCI					
5 VDC-TTL					Non-Isolated	Digital Filter	Interrupt input edge selection					

Digital I/O

										Model
PCI		Low Profile	5 VDC-TTL	Non-Isolated	I/O	Digital Filter	Interrupt input edge selection	Bus Master		PIO-nn/mmT(PCI)H
					Bi-direct	Digital Filter	Interrupt input edge selection			DIO-48D2-PCI
					Signal Pattern Detection and Generator					PIO-32DM(PCI)
		Low Profile	12 to 24 VDC	Optocoupler isolation	I/O	Digital Filter	Interrupt input edge selection	Built-in Power		PIO-16/16L(LPCI)H
						Digital Filter	Interrupt input edge selection			PIO-16/16B(LPCI)H
						Digital Filter	Interrupt input edge selection			PIO-16/16T(LPCI)H
						Digital Filter	Interrupt input edge selection			PIO-48D(LPCI)H



Counters

These cards communicate pulse train input and pulse number count functions to the PC. They calculate addition and/or subtraction of count values onboard and read out current count values when needed. They can connect to incremental rotary encoders, linear gauges, pulse output type flowmeters or power meters.

										Model
USB		Low Profile	32-bit Up/Down Counter	Isolated input	4 ch	500 kHz			CNT-3204IN-USB	
			32-bit Up/Down Counter	TTL input / Differential input	8 ch	10 MHz	Bus Master	CNT-3208M-PE		
PCI Express		Low Profile	32-bit Up/Down Counter	LVTTTL input	4 ch		Bus Master	CNT-3204MT-LPE		
			24-bit Up/Down Counter	TTL input / Isolated input	4 ch	TTL input: 1 MHz Isolated input: 500 kHz		CNT24-4(PCI)H		
PCI		Low Profile	24-bit Up/Down Counter	TTL input / Differential input	8 ch	1 MHz		CNT24-4D(PCI)H		
			32-bit Up/Down Counter	LVTTTL input	4 ch	10 MHz	Bus Master	CNT32-8M(PCI)		
			32-bit Up/Down Counter	LVTTTL input	4 ch		Bus Master	CNT32-4MT(LPCI)		
			32-bit Up/Down Counter	LVTTTL input	4 ch		Bus Master	CNT32-4MT(LPCI)		

Motion Controllers


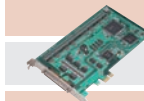
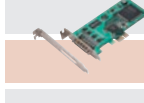
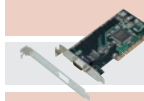
Enables PC controlled output of pulse train according to a specified pulse number and frequency. Can automatically output control pulse which corresponds to operation parameters such as target position, speed and acceleration/ deceleration rate. Limit input functions [required for positioning control] are also provided. For use with pulse-input type stepping motors or servo motors.

										Model
PCI Express			4 Axes	0.3 to 9.8 Mpps	Counter 4 ch	Limit Switch Input	Synchronization control			SMC-4DL-PE
			8 Axes		Counter 8 ch	Limit Switch Input	Synchronization control			SMC-8DL-PE
PCI			4 Axes	0.1 to 6.5 Mpps	Counter 4 ch	Frame Data Store	Limit Switch Input	Synchronization control	*1	SMC-4DF2-PCI
			8 Axes		Counter 8 ch	Frame Data Store	Limit Switch Input	Synchronization control	*1	SMC-8DF2-PCI
			4 Axes	0.3 to 9.8 Mpps	Counter 4 ch		Limit Switch Input	Synchronization control		SMC-4DL-PCI
			8 Axes		Counter 8 ch		Limit Switch Input	Synchronization control		SMC-8DL-PCI



*1: Compatible with both SMC-4DF-PCI and SMC-8DF2-PCI type cards.

Serial Communications

Provides PC with RS-232C/422A/485 serial communication ports. Used as a communication interface with measurement devices, barcode readers, industrial AV equipment, UPS, printers and modems which are equipped with RS-232C/422A/485 serial communication ports.




										Model
USB			RS-232C	1 ch	300 to 921,600 bps					COM-1(USB)H
										COM-1P(USB)H
										COM-4CN-USB
										COM-1PD(USB)H
PCI Express		Low Profile	RS-422A / RS-485	1 ch	1Mbps(Max.)					COM-1PD(USB)H
				4 ch						COM-4PDHN-USB
			CAN 2.0B	2 ch						CAN-2-USB
				4 ch						COM-2C-PE
			RS-232C	2 ch						COM-4C-PE
				4 ch						COM-8C-PE
			RS-232C	2 ch						COM-2PC-PE
				4 ch						COM-4PC-PE
			RS-422A / RS-485	2 ch	2 to 921,600 bps					COM-2PD-PE
				4 ch						COM-4PD-PE
			RS-232C	1 ch						COM-1C-LPE
				2 ch						COM-2C-LPE
PCI		Low Profile	RS-232C	4 ch						COM-4C-LPE
				8 ch						COM-8C-LPE
			RS-422A / RS-485	1 ch	30 to 921,600 bps					COM-1PDH-LPE
				2 ch						COM-2PD-LPE
			CAN FD	4 ch	5Mbps(Max.)					CAN-4PF-PE
				4 ch		1Mbps(Max.)				CAN-4P-PE
			RS-232C	2 ch						COM-2(PCI)H
				4 ch						COM-2P(PCI)H
			RS-232C	4 ch						COM-4(PCI)H
				8 ch						COM-8(PCI)H
			RS-422A / RS-485	2 ch						COM-2PD(PCI)H
				4 ch						COM-4PD(PCI)H
PCI		Low Profile	RS-232C	2 ch						COM-2CL-PCI
				4 ch						COM-4CL-PCI
			RS-422A / RS-485	2 ch	15 to 230,400 bps					COM-2DL-PCI
				4 ch						COM-4DL-PCI
			RS-232C	1 ch						COM-1(LPCI)H
				2 ch						COM-2(LPCI)H
			RS-232C	4 ch						COM-4(LPCI)H
				8 ch						COM-8C-LPCI

Serial Communications

							Model
PCI		Low Profile	RS-422A / RS-485	1 ch	2 to 921,600 bps	Individual Isolated Surge Protection	COM-1PD(LPCI)H
				2 ch		Individual Isolated Surge Protection	COM-2PD(LPCI)H
Media Converter			RS-232C	1 ch	300 to 921,600 bps	Wire LAN Convert	RP-COM(FIT)H
						Wire LAN Convert	RP-COM(FIT)H-AF
			CAN 2.0B	2 ch	1Mbps(Max.)	Wireless LAN Convert	CAN-2-WF

GPIB Communications

Provide PCs with GPIB-compliant communication port(s).
These can be used as the communication interface for measurement devices equipped with GPIB communication ports as well as various other controllers.

							Model	
USB			1.5 Mbyte/sec				GPIB-FL2-USB	
PCI Express		Low Profile	1.5 Mbyte/sec	Timer	Bus Master	Bus Analyzer	GPIB-F-LPE	
				Timer	Bus Master		GPIB-FL-LPE	
PCI			1.5 Mbyte/sec	Timer	Bus Master	Bus Analyzer	GP-IB(PCI)F	
				Timer	Bus Master		GP-IB(PCI)FL	
		Low Profile		Timer	Bus Master	Bus Analyzer	GP-IB(LPCI)F	
				Timer	Bus Master		GP-IB(LPCI)FL	

Software

We provide all kinds of middleware for program development efficiency. In addition, all kinds of software are available such as various measurement application programs that can be used as genuine PC data loggers or electronic measuring devices from the first day.

API Programming Using Windows / Linux


Driver Library

API-PAC(W32)

The library software that provides CONTEC's measurement control device commands using OS-standard API. High-speed application software can be created that makes use of device characteristics in all kinds of programming languages including Visual Basic, Visual C and gcc.

Free download from Contec website

Development and Runtime are license-free.



Easily Build a Measurement Application

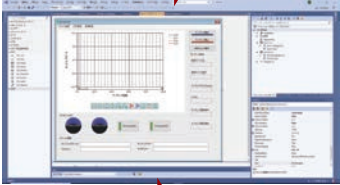
.NET components for DAQfast measurement system development

DAQ-DNC-FE

A GUI-based measurement system development support tool compatible with the Visual Studio low-code integrated development environment. It contains a collection of components that are very useful for developing applications using Contec's wealth of measurement control devices in the PC-HELPER series (PCIe/PCI, USB, Ethernet) and the industrial IoT CONPROSYSTM nano series.

Free download from Contec website

Quickly develop apps in 3 easy steps



Sophisticated components for inspection measurement and data recording apps

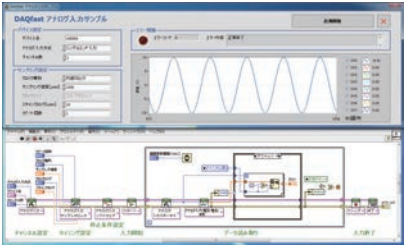
Data Acquisition with LabVIEW

LabVIEW Data Acquisition Library

DAQ-LV-WIN

CONTEC's devices are LabVIEW compatible. Usable in the same way as LabVIEW standard data collection VI using the dedicated library DAQfast plug-in.

Free download from Contec website



Data Acquisition with Edgecross

Data collection library / DAQfast for Edgecross

DAQ-EC-AIO / DAQ-EC-DIO / DAQ-EC-CNT / DAQ-EC-MDB

A software that implements cooperation between Edgecross basic software platform and data from measurement control and remote I/O devices.

Free download from Contec website

IT Systems

Edge Computing

FA (Factory Floor)

Edge Applications

Edgecross Basic Software

Data Collector

CONPROSYS IoT Edge controller

CONPROSYS M2M controller

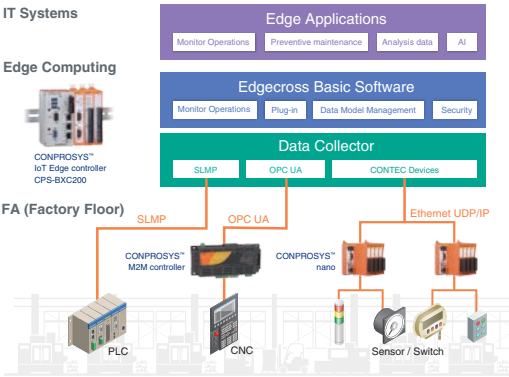
CONPROSYS nano

CONTEC Devices

PLC

CNC

Sensor / Switch



* This library / middleware does not work alone. It is necessary to install an "Edgecross basic software for Windows" in advance. (Japan Only)
* Requires purchase from Edgecross Marketplace

Data Acquisition with Fieldbus

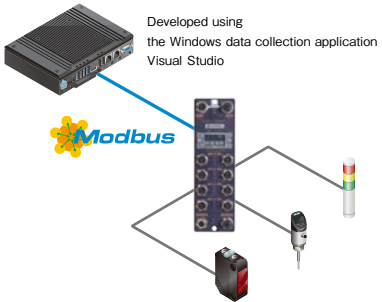
DAQfast Modbus Communication Library

DAQ-LIBMB-WIN / DAQ-LIBMB-LNX

The master functions for Modbus communication are provided by the API, allowing communication control of a Modbus slave device from a PC.

Free download from Contec website

Developed using the Windows data collection application Visual Studio



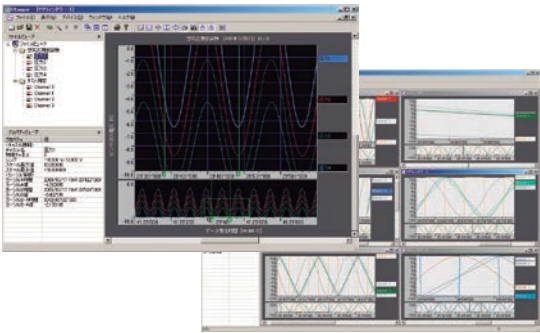
Graph Observation & Data Collection Tool

Data Logging Software

C-LOGGER

This is data logging software that is compatible with CONTEC analog input devices. C-LOGGER provides true data collection and monitoring function, such collected signal data graph drawing, zoom observation, file saving, and dynamic transfer to Excel (spreadsheet program). No additional programming is required.

Free download from Contec website



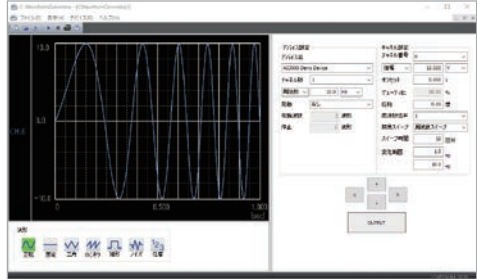
Waveform Generation & Output Tool

Waveform Generator

C-WaveformGenerator

No programming required. Contains 6 basic waveforms (DC, sine wave, triangular wave, square wave, ramp wave, and noise) that can be used immediately.

Free download from Contec website



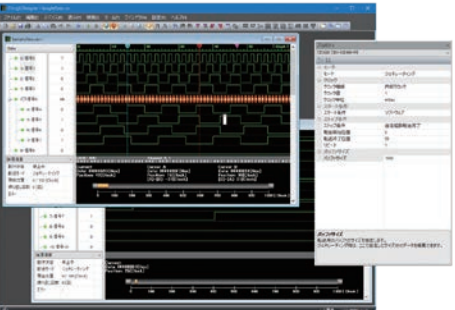
Pattern Generation and Logic Analysis Tool

Pattern Generator / Logic Analyzer

C-LogicDesigner

Logic pattern creation functions based on an intuitive and easy-to-understand GUI. High-speed logic analyzer functions with sampling at up to 50MHz and pulse generator functions.

Free download from Contec website













Cables




Cable with different connectors are designed to connect our interface cards and units to external world.

Note 1: Each cable connects one connector of the board/unit. For the board/unit with two connectors, two cables are required.




Note 2: A longer cable will have a larger resistance, customer needs to select a suitable length of cable. Normally a three meters or longer cable is not suitable to connect external analog signals to the analog I/O boards. It is user's responsibility to select a connecting cable for the application system.

		Connector Type		Cable Type	Cable Length	Model
Two Side Connectors		100-pin Connector		Shield Cable	0.5m/1.64ft	PCB100PS-0.5
					1.5m/4.92ft	PCB100PS-1.5
					3.0m/9.84ft	PCB100PS-3
					5.0m/19.1ft	PCB100PS-5
		96-pin Connector			0.5m/1.64ft	PCB96PS-0.5P
					1.5m/4.92ft	PCB96PS-1.5P
					3.0m/9.84ft	PCB96PS-3P
					5.0m/19.1ft	PCB96PS-5P
		Flat Cable		1.5m/4.92ft	PCB96P-1.5	
				3.0m/9.84ft	PCB96P-3	
				5.0m/19.1ft	PCB96P-5	
		68-pin Connector		Shield Cable	0.5m/1.64ft	PCB68PS-0.5P
					1.5m/4.92ft	PCB68PS-1.5P
					3.0m/9.84ft	PCB68PS-3P
	50-pin Connector	0.5m/1.64ft	PCB50PS-0.5P			
		1.5m/4.92ft	PCB50PS-1.5P			
		3.0m/9.84ft	PCB50PS-3P			
		5.0m/19.1ft	PCB50PS-5P			
Single Side Connector		100-pin Connector	Flat Cable		1.5m/4.92ft	PCA100P-1.5
				3.0m/9.84ft	PCA100P-3	
		96-pin Connector	Shield Cable	0.5m/1.64ft	PCA96PS-0.5P	
				1.5m/4.92ft	PCA96PS-1.5P	
				3.0m/9.84ft	PCA96PS-3P	
				5.0m/19.1ft	PCA96PS-5P	
		Flat Cable	1.5m/4.92ft	PCA96P-1.5		
			3.0m/9.84ft	PCA96P-3		
			5.0m/19.1ft	PCA96P-5		
		68-pin Connector	Shield Cable	0.5m/1.64ft	PCA68PS-0.5P	
1.5m/4.92ft				PCA68PS-1.5P		

Single Side Connector	Connector Type		Cable Type	Cable Length	Model
		50-pin Connector	Shield Cable	0.5m/1.64ft	PCA50PS-0.5P
				1.5m/4.92ft	PCA50PS-1.5P
				3.0m/9.84ft	PCA50PS-3P

	Connector Type	Distributed Connectors	Cable Type	Cable Length	Model
Fan-Out Cables		Two 37-pin D-SUB Connectors	Shield Cable	1.5m/4.92ft	PCB100WS-1.5
				3.0m/9.84ft	PCB100WS-3
				5.0m/19.1ft	PCB100WS-5
				1.5m/4.92ft	PCB96WS-1.5P
				3.0m/9.84ft	PCB96WS-3P
				5.0m/19.1ft	PCB96WS-5P
		Two 37-pin Connectors, One 15-pin Connectors		0.5m/1.64ft	DT-G2E-32
		One 37-pin Connectors, One 15-pin Connectors			DT-G2E-16

* These fan-out type cables convert a 100-pin connector or 96-pin connector of a digital I/O board to two 37-pin D-SUB connectors and the pin assignment is the same as our 37-pin D-SUB connector type digital I/O boards.

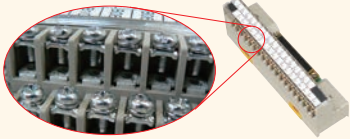
Fan-Out Cables	Connector Type		No. of Distributed Connectors	Cable Type	Cable Length	Model
		78-pin Connector	Eight 9-pin Connectors	Shield Cable	1m/3.28ft	PCE78/9PS
		68-pin Connector				PCE68-9PS
		44-pin Connector	Two 9-pin Connectors		0.25m/0.82ft	PCE44/9P2S
						PCE44/9P4S
		37-pin Connector	Four 9-pin Connectors			PCE37/9PS



* These fan-out cables convert a 78/68/44/37-pin connector of a serials communication board to RS-232C standard 9-pin D-SUB connectors

Screw Terminal Blocks

The spring-up type terminal blocks help users to wire the external devices to Contec PCI Express / PCI bus interface boards through the connecting cables. The blocks equipped 3mm / 0.12' spring-up type screws and are 35mm / 1.38' DIN-rail mountable.

Spring-up type screw mechanism An internal spring retains the terminal screw by lifting it up when it is loosened and removed from the screw hole. This allows efficient wiring and prevents accidental dropping of terminal screw.

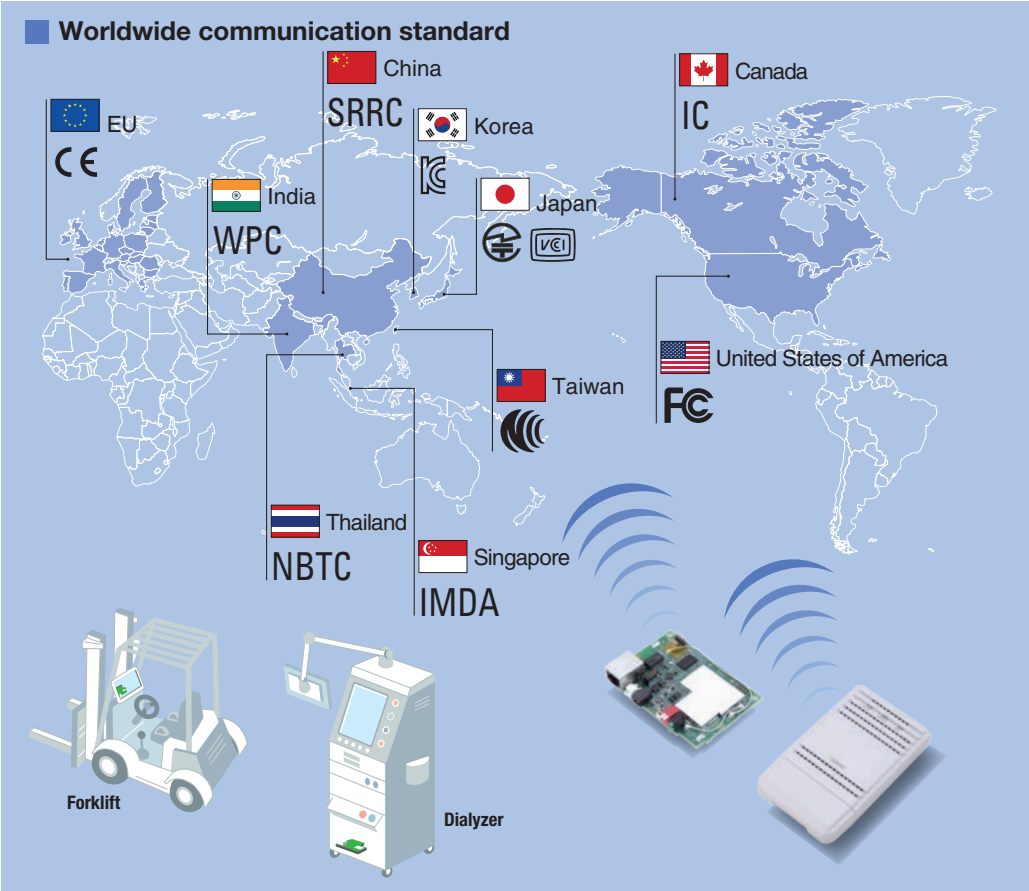





Wiring Blocks	Connector Type		Spec. of Screw Terminal	No. of Terminals	Model
		100-pin Connector	M3 screw terminal	100	EPD-100A
		96-pin Connector		96	EPD-96A
		68-pin Connector		68	EPD-68A
		50-pin Connector		50	EPD-50A
		37-pin Connector		37	EPD-37A

Communication Industrial LAN and Wireless

Providing Custom Communication Products that Deliver High Reliability and Superior Functionality




Contec's network products allow our customers to provide safe and convenient communication network environments in locations where security is a necessity (offices, schools, factories and logistics systems). Our expertise and strength in the design and development of industrial products allows us to ensure high reliability and functionality of our network products and meet our customer's every customization requirements.

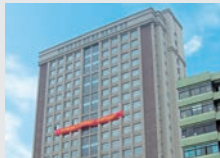






Embedded Type Wireless LAN Modules 	Japan USA, Canada, India, Singapore EU(R&TTE directive), Thailand Korea Taiwan China	FXE3000 FXE3000-US FXE3000-EU FXE3000-KR FXE3000-TW FXS3001-CN
Office Type Wireless LAN Modules 	Japan USA, Canada, India, Singapore EU(R&TTE directive), Thailand Korea Taiwan China China	FXA3000 FXA3000-US FXA3000-EU FXA3000-KR FXA3000-TW FXS5000-CN FXA5020-CN
Embedded Type HUB Modules 	10M/100M/1000M* Switch type HUB Wide Operating Temperature Range (ex. -40 to 70°C) *1000M only supports SH-9xxxxx-xxxx.	SH-9008AT-POE2 (8-port) SH-8008AT-POE (8-port) SH-9008H-FIT (8-port) SH-9005F (5-port) SH-8008F (8-port) SH-8008F-2 (8-port) CPS-HBL-8005F (5-port)

Contec's global presence consists of multiple R&D, Manufacturing, Sales & Procurement locations that strategically placed around the world. The Contec network allows us to instantly meet our customer's needs with quality products and solutions.



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CONTEC CO., LTD. HEADQUARTERS / FACTORY		CONTEC AMERICAS INC.	
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Manufacturing	Sales	Manufacturing	Sales

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R&D	R&D	Sales	Sales	LO
Procurement	Procurement			
Manufacturing	Manufacturing			
Sales	Sales			