Related Products

1. CAN Bus to Ethernet Gateway

2. Serial Device to Ethernet Gateway

3. Wireless ZigBee Series

7

SCADA

Data Server

RS-405

RS-405

RS-405

RS-405

RS-405

RS-405

Ethernet Layer

Ring

Fieldbus Layer

CAN Bus to Ethernet Gateway

CAN/Ethernet PAC
Intelligent Ethernet to CAN Gateway
CANopen Master/Modbus TCP Server Gateway
DeviceNet Master/Modbus TCP Server Gateway

Serial Device to Ethernet Gateway

Programmable Device Servers (PDS-700)
Device Servers (DS-700)

Wireless ZigBee Series

Ethernet/Serial to ZigBee Converter
ZigBee AIO (Built-in Repeater Function)
ZigBee DIO (Built-in Repeater Function)
ZigBee Repeater

Device Layer

1. CAN Bus to Ethernet Gateway

CAN bus Common Features

- Compatible with CAN specification 2.0A and 2.0B
- Fully compliant with the ISO-11898-2 standard
- Support several kinds of bauds from 10K to 1 Mbps
- 2500 V$_{rms}$ photo couple isolation on the CAN bus
- Jumper or DIP switch for 120 Ω terminal resistor of CAN bus
- The max baud is 1 Mbps and the max length is 5000 m
- DeviceNet/CANopen/J1939...applications

| The relation of CAN bus Baud and Length ||
Baud (bit/sec)	Ideal Bus Length (m)
1M	25
800K	50
500K	100
250K	250
125K	500
50K	1000
20K	2500
10K	5000

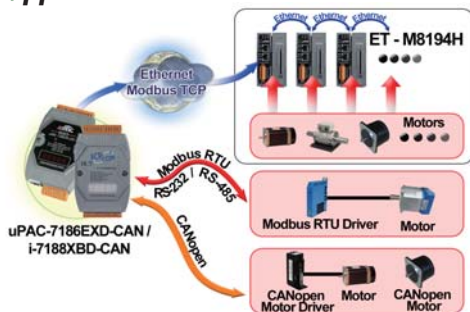## CAN/Ethernet PAC

μPAC-7186EXD-CAN

μPAC-7186 CAN bus series Programmable Automation Controller

The μPAC-7186EXD-CAN PACs (Programmable Automation Controller) are powered by 80186-80 MHz CPU with 512K bytes of static RAM, and 512K bytes of Falsh memory with CAN, RS-232, RS-485 and Ethernet port.
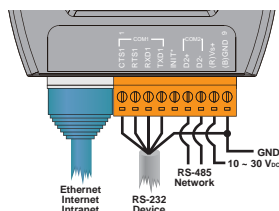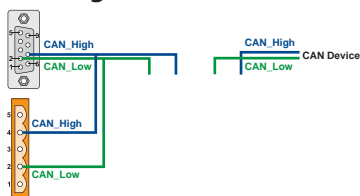
Features

- High reliability in harsh environment
- Embedded MiniOS7, anti-virus
- Built-in watchdog timer (WDT)
- Ethernet Protocols: TCP, UDP, IP, ICMP, ARP
- Faster 10/100M Ethernet port
- Support virtual COM technology
- Free easy-to-use software development toolkits
- Modbus protocol
- Support DeviceNet/CANopen/J1939...CAN applications

Applications

Wiring

Ordering Information

μPAC-7186EXD-CAN	Programmable Automation Controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programable LEDs, 512K flash ,512K SRAM, developing tool kit, MiniOS7.

Intelligent Ethernet to CAN Gateway

I-7540D

Internet communication controller with one CAN bus, one RS-232, one RS-485 and one Ethernet

I-7540D is a CAN-Ethernet Gateway to control networked communication between CAN and Ethernet. It also can be used as a Ethernet to RS-232/485 devices Server.

- ○ High reliability in harsh environment
- ○ Built-in 80186-80 MHz CPU
- ○ Built-in watchdog timer (WDT)
- ○ COM driver support interrupt & 1K QUEUE Input & Output buffer
- ○ Support one RS-232 port, one RS-485 port and one CAN port
- ○ Support virtual COM technology
- ○ 2500 V_{rms} photo-isolation protection on CAN side
- ○ TCP/UDP protocol transmission between CAN bus and Ethernet
- ○ Free CAN monitor tools

Ordering Information

I-7540D	Internet communication controller with one CAN bus, one RS-232, one RS-485 and one Ethernet

CANopen Master/Modbus TCP Server Gateway

GW-7433D

Internet communication controller with one CAN bus, one RS-232, one RS-485 and one Ethernet

- ○ Programmable standard CANopen baud, such as 10 Kbps, 20 Kbps, 50 Kbps
- ○ 125 Kbps, 250 Kbps, 500 Kbps, 800 Kbps and 1 Mbps
- ○ Support maximum 50 TxPDO, 50 RxPDO, 15 SDO to SDO server
- ○ Support Communication Object: TxPDO, RxPDO, and server SDO
- ○ Support on-line configure CANopen slaves
- ○ Communicate with CANopen slaves automatically when GW-7433D boots up
- ○ Allow 5 Modbus/TCP masters to access GW-7433 simultaneously
- ○ CANopen Version: DS301 V4,01
- ○ Device Profile: DSP-401 v2.0

Ordering Information

GW-7433D	Modbus/TCP server to CANopen master Gateway

DeviceNet Master/Modbus TCP Server Gateway

I-7243D

Modbus/TCP server to DeviceNet master Gateway

- ○ Programmable DeviceNet Master MAC 1D
- ○ Programmable DeviceNet transfer-rate 125K, 250K, 500K
- ○ Supports maximum DeviceNet devices up to 63
- ○ Predefined Master/Slave Connection Set
- ○ The maximum Fragment number is (Input/Output) up to 64
- ○ Supports I/O Operation Mode: Poll, Bit-Strobe and Change Of State/Cyclic
- ○ Supports on-line adding device into and removing device from network
- ○ Supports boot-up auto communicate with slave devices
- ○ Converters single Modbus/TCP to multi Modbus/RTU, setting by Utility
- ○ Supports VxComm technique for every COM ports of controllers, setting by Utility
- ○ Allowed multi-client (or master) access simultaneously
- ○ Supports one Poll, one Bit-Strobe, one COS, one Cyclic IO connection for each DeviceNet device when connected with this module

Ordering Information

I-7243D	Modbus/TCP server to DeviceNet master Gateway

7

Related Products   CAN Bus to Ethernet Gateway

2. Serial Device to Ethernet Gateway

7

Programmable Device Servers

Liberate your serial devices to modern world.
Programmable Device Server

Connect every of your serial devices into Ethernet. PLCs, bar code readers, RFID readers, meters, motion controllers and many of other serial devices have been widely-used for years in every corner of the world. To make the most use of recorded data and to achieve remote control conveniently, we integrate those serial devices with modern networks, and the key to do these counts on the PDS. All PDS series feature programmable ability that makes even your various ideas into reality!

Easy Serial Device Networking with "transparency"

The most intuitive and easiest way to remotely control serial devices is to access serial devices transparently via network with no software modification required. PDS product lines offer two transparent applications:

◯ TCP/IP Socket Programming: By TCP/IP Socket Programming, it could exchange information with specific PDS serial port and talk to serial devices directly.

◯ Virtual COM Ports: ICP DAS developed a specific function called "Virtual COM" that simulates PDS serial ports as fixed PC COM ports. Virtual COM ports appear to the system and applications like real ones, the users could immediately enjoy the convenience brought by networking.

VxComm Driver creates virtual COM port(s) on Windows NT 4.0/2000/XP/2003/Vista32 and maps them to the remote serial port(s) of the PDS-700/DS-700 series. The user's serial client programs need only to change to the virtual COM port to get the access of serial devices that are allocated in the Internet or Ethernet network via the PDS-700/DS-700 series.
Easy serial devices networking just in minutes.

Programmable Enhanced "Device Servers"

The programmable feature of PDS series products makes it possible to effectively build in exclusive protocols and exclusive communication mechanism of complex applications in PDS. This provides the following advantages:

○ **Effective network transmission:** Place your customized software on PDS to directly perform processions locally. The effective data and information could be sent back to PC periodically according to schedules planned in advance and devices could work independently on-site even when not connecting to a network. Therefore, the design of system could be much more flexible. It also reduces the need to rely on network, which is an inevitable factor for conventional DS (Device Server) - it has to keep on "talking" to PC via network to ensure status maintains transparency.

○ **Previous development effort could be duplicated:** Along with serial devices, you could place your customized or value-add software on PDS to implement an intelligent Ethernet controller. This controller could be used in applications for next projects. It dramatically reduce programming job. In addition, your value-add software is embedded in PDS, if a computer system undergoes hardware replacement or upgrade; it doesn't need to consider incompatible problems, therefore reduce system maintenance work.

Virtual I/O Highly Integrates On-Site Messages

I/O acquisition is very important when performing on-site integration, along with DCON utility provided by ICP DAS, the RS-485 of PDS could connect to I-7000 series products to offer abundant I/O modules for various purposes. For easier on-site integration operations, partial PDS models also provide Digital I/O, which is also supported by DCON utility or other DCON client programs.

"Virtual I/O" is the extension of "Virtual COM" technology that simulates PDS's digital I/Os control as a virtual COM port (Port I/O) application on PC. And since now, you are able to access PDS's digital I/Os by DCON protocol through the virtual COM port. Besides, DCON utility also supports configuring PDS's digital I/Os through the help of "Virtual I/O" technology. So you can diagnose PDS's digital I/Os and complete the I/Os application in a convenient way.

7

Related Products   Serial Device to Ethernet Gateway

PDS-700 Programmable Device Servers

Features

- Networkable serial devices
- "Virtual COM" extend COM ports
- Powerful programmable device server
- "Virtual I/O" integrates on-site I/O
- Watchdog timer suitable for use in harsh environments
- 10/100 Base-TX Ethernet Controller
  (Auto-negotiating, auto MDI/MDI-X, LED indicator)
- Power reverse polarity protection circuit
- RS-485 port ESD protection circuit
- Self-tuner ASIC controller on RS-485 port
- Enables download of programs from PC
- 5-digit display (only for version with display)
- IP67 against the intrusion of dust, water, etc (IP67 version)
- RoHS compliant with No Halogen

● Specifications

CPU	80186-80 MHz
Ethernet	10/100 Base-TX
SRAM/Flash	512 KB/512 KB
COM1	5-wire RS-232 (RXD, TXD, CTS, RTS, GND)
UART	16c550 or compatible
Baud rate	115200 bps Max.
D/I	Source, Dry Type, L: 0 ~ 1V, H: 3.5 ~ 30V
D/O	Open Collector, Sink/NPN, 30V/100 mA Max.
Display	7-segment LED display for D version
Frame GND	Yes
Mounting	DIN-Rail Mounting

✓ Selection Guide

Model	DI/DO	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8
PDS-720 PDS-720D	-	5-wire RS-232	2-wire RS-485	-	-	-	-	-	-
PDS-721 PDS-721D	6/7	5-wire RS-232	2-wire RS-485	-	-	-	-	-	-
PDS-732 PDS-732D	4/4	5-wire RS-232	2-wire RS-485	5-wire RS-232	-	-	-	-	-
PDS-734 PDS-734D	4/4	5-wire RS-232	2-wire RS-485	4-wire RS-422	-	-	-	-	-
PDS-742 PDS-742D	-	5-wire RS-232	2-wire RS-485	5-wire RS-232	9-wire RS-232	-	-	-	-
PDS-742-IP67	-	5-wire RS-232	2-wire RS-485	5-wire RS-232	5-wire RS-232	-	-	-	-
PDS-743 PDS-743D	4/4	5-wire RS-232	2-wire RS-485	3-wire RS-232	3-wire RS-232	-	-	-	-
PDS-752 PDS-752D	-	5-wire RS-232	2-wire RS-485	5-wire RS-232	5-wire RS-232	5-wire RS-232	-	-	-
PDS-755 PDS-755D	-	5-wire RS-232	2-wire RS-485	2-wire RS-485	2-wire RS-485	2-wire RS-485	-	-	-
PDS-762 PDS-762D	1/2	5-wire RS-232	2-wire RS-485	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232	-	-
PDS-782 PDS-782D	-	5-wire RS-232	2-wire RS-485	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232
PDS-782-25 PDS-782D-25	-	5-wire RS-232	2-wire RS-485	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232	3-wire RS-232
PDS-700D = PDS-700 + 7-Seg. LED Display									

7

PDS-720/PDS-720D **NEW**

PDS-720: 2-Port Programmable Device Server
PDS-720D: PDS-720 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485

PDS-721/PDS-721D **NEW**

PDS-721: 2-Port Programmable Device Server
with DI/DO
PDS-721D: PDS-721 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- D/O: 7-Channel, Sink/NPN, 30V/100 mA
  Max.
- D/I: 6-Channel, Source, Dry Type,
  L: 0 V_{DC} ~ +1 V_{DC}, H: +3.5 V_{DC} ~ +30 V_{DC}

PDS-732/PDS-732D **NEW**

PDS-732: 3-Port Programmable Device Server
with DI/DO
PDS-732D: PDS-732 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3: 5-Wire RS-232
- D/O: 4-Channel, Sink/NPN, 30V/100 mA
  Max.
- D/I: 4-Channel, Source, Dry Type,
  L: 0 V_{DC} ~ +1 V_{DC}, H: +3.5 V_{DC} ~ +30 V_{DC}

PDS-734/PDS-734D **NEW**

PDS-734: 3-Port Programmable Device Server
with DI/DO
PDS-734D: PDS-734 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3: 4-Wire RS-422
- D/O: 4-Channel, Sink/NPN, 30V/100 mA
  Max.
- D/I: 4-Channel, Source, Dry Type,
  L: 0 V_{DC} ~ +1 V_{DC}, H: +3.5 V_{DC} ~ +30 V_{DC}

PDS-742/PDS-742D **NEW**

PDS-742: 4-Port Programmable Device Server
PDS-742D: PDS-742 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3: 5-Wire RS-232
- COM4: 9-Wire RS-232

PDS-743/PDS-743D **NEW**

PDS-743: 4-Port Programmable Device Server
with DI/DO
PDS-743D: PDS-743 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~4: 3-Wire RS-232
- D/O: 4-Channel, Sink/NPN, 30V/100 mA
  Max.
- D/I: 4-Channel, Source, Dry Type,
  L: 0 V_{DC} ~ +1 V_{DC}, H: +3.5 V_{DC} ~ +30 V_{DC}

Related Products   Serial Device to Ethernet Gateway

PDS-752/PDS-752D NEW

PDS-752: 5-Port Programmable Device Server
PDS-752D: PDS-752 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~5: 5-Wire RS-232

PDS-755/PDS-755D NEW

PDS-755: 5-Port Programmable Device Server
PDS-755D: PDS-755 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~5: 2-Wire RS-485

PDS-762/PDS-762D NEW

PDS-762: 6-Port Programmable Device Server
with DI/DO
PDS-762D: PDS-762 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~6: 3-Wire RS-232
- D/O: 2-Channel, Sink/NPN, 30V/100 mA Max.
- D/I: 1-Channel, Source, Dry Type,
  L: 0 V_{DC} ~ +1 V_{DC}, H: +3.5 V_{DC} ~ +30 V_{DC}

PDS-782/PDS-782D NEW

PDS-782: 8-Port Programmable Device Server
PDS-782D: PDS-782 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~8: 3-Wire RS-232

Available Soon

PDS-742-IP67

4-Port Programmable Device Server with IP67 casing

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232 (8-Pin RJ-45)
- COM2: 2-Wire RS-485 (8-Pin RJ-45)
  with 2500 Vrms isolation
- COM3: 5-Wire RS-232 (8-Pin RJ-45)
- COM4: 5-Wire RS-232 (8-Pin RJ-45)

Available Soon

PDS-782-25/PDS-782D-25

PDS-782-25: 8-Port Programmable Device Server
PDS-782D-25: PDS-782-25 with LED Display

- Ethernet: 10/100 Base-TX
- COM1: 5-Wire RS-232
- COM2: 2-Wire RS-485
- COM3~8: 3-Wire RS-232 (Male DB-9)

Ordering Information	
PDS-720 PDS-720D	Programmable Device Server with 1-Port RS-232 and 1-Port RS-485 PDS-720 with LED display
PDS-721 PDS-721D	Programmable Device Server with 1-Port RS-232, 1-Port RS-485, 6-ch D/I and 7-ch D/O PDS-721 with LED display
PDS-732 PDS-732D	Programmable Device Server with 2-Port RS-232, 1-Port RS-485, 4-ch D/I and 4-ch D/O PDS-732 with LED display
PDS-734 PDS-734D	Programmable Device Server with 1-Port RS-232, 1-Port RS-485, 1-Port RS-422, 4-ch D/I and 4-ch D/O PDS-734 with LED display
PDS-742 PDS-742D	Programmable Device Server with 3-Port RS-232 and 1-Port RS-485 PDS-742 with LED display
PDS-742-IP67	Programmable Device Server with 3-Port RS-232, 1-Port RS-485 and IP67 casing
PDS-743 PDS-743D	Programmable Device Server with 3-Port RS-232, 1-Port RS-485, 4-ch D/I and 4-ch D/O PDS-743 with LED display
PDS-752 PDS-752D	Programmable Device Server with 4-Port RS-232 and 1-Port RS-485 PDS-752 with LED display
PDS-755 PDS-755D	Programmable Device Server with 1-Port RS-232 and 4-Port RS-485 PDS-755 with LED display
PDS-762 PDS-762D	Programmable Device Server with 5-Port RS-232, 1-Port RS-485, 1-ch D/I and 2-ch D/O PDS-762 with LED display
PDS-782 PDS-782D	Programmable Device Server with 7-Port RS-232 and 1-Port RS-485 PDS-782 with LED display
PDS-782-25 PDS-782D-25	Programmable Device Server with 7-Port RS-232 and 1-Port RS-485 PDS-782-25 with LED display

DS-700 Device Servers

✅ Selection Guide

Model	DI/DO	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8
DS-712	-	5-wire RS-232	-	-	-	-	-	-	-
DS-715	-	2-wire RS-485 4-wire RS-422	-	-	-	-	-	-	-

DS-712 NEW

1-Port RS-232 Device Server
(Non-Programmable)

○ Ethernet: 10/100 Base-TX
○ COM1: 5-Wire RS-232

DS-715 NEW

1-Port RS-422/485 Device Server
(Non-Programmable)

○ Ethernet: 10/100 Base-TX
○ COM1: 4-Wire RS-422 or 2-Wire RS-485
(2000 V$_{DC}$ Isolation)

Ordering Information	
DS-712	Device Server with 1-Port RS-232
DS-715	Device Server with 1-Port RS-422/RS-485

3. Wireless ZigBee Series

Ethernet/Serial to ZigBee Converter

7

NEW

ZB-2570
ZB-2571

NEW

ZB-2550
ZB-2551

ZB-2570/ZB-2571

ZB-2570/ZB-2571 is an Ethernet/RS-485/RS-232 to ZigBee network converter. It enables Ethernet/RS-232/485 devices to be wirelessly and easily connected to a new or existing system.

ZB-2570 is a net Host and ZB-2571 is a net Slave. It also supports various data formats and baud rates that can be configured via a Windows-based GUI utility. The ZB-2570/ZB-2571 can implement an ad-hoc, star or mesh network topology.

In some existing systems that use an Ethernet/RS-485/RS-232 network, it is sometimes difficult to extend the new devices due to building structure issues, wiring problems or other reasons. The ZB-2570/ZB-2571 can be easily added to an existing system in order to extend your network.

ZB-2550/ZB-2551

We also provide the ZB-2550 (Host) and the ZB-2551 (Slave) converters that only have RS-232/RS-485 interfaces.

Specifications	
RF Channels	16
Receive Sensitivity	-102 dBm
Transmit Power	12 dBm
Data Encryption	AES-CTR
Network Topology Support	Star, Mesh and cluster tree
Certification	TUV
Antenna	2.4 GHz, 3 dBi Omni-Directional antenna
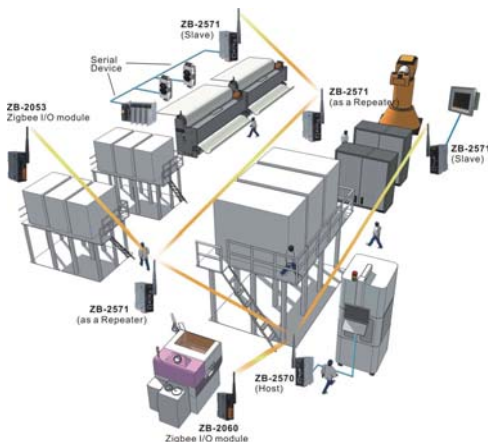
Ordering Information	
ZB-2550 CR	RS-485/RS-232 to ZigBee Converter (Host) (RoHS)
ZB-2550/S CR	RS-485/RS-232 to ZigBee Converter (Host) (RoHS) + GPSU06U-6 (Power Supply)
ZB-2551 CR	RS-485/RS-232 to ZigBee Converter (Slave) (RoHS)
ZB-2551/S CR	RS-485/RS-232 to ZigBee Converter (Slave) (RoHS) + GPSU06U-6 (Power Supply)
ZB-2570 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS)
ZB-2570/S CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Host) (RoHS) + GPSU06U-6 (Power Supply)
ZB-2571 CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Slave) (RoHS)
ZB-2571/S CR	Ethernet/RS-485/RS-232 to ZigBee Converter (Slave) (RoHS) + GPSU06U-6 (Power Supply)

ZigBee AIO (Built-in Repeater Function)

Available Soon

ZB-2015

Wireless 6-channel RTD Input Module with 3-wire RTD Lead Resistance Elimination

Analog Input
- Input Channels: 6
- Input Type: RTD
- Wire Connection: 2 or 3 Wires
- RTD Type: Pt100, Pt1000, Ni120, Cu100, Cu1000
- Resolution: 16-bit
- Sampling Rate: 12 Samples/Sec. (Total)
- Accuracy: +/-0.05%
- Voltage Input Impedance: >1 MΩ
- Open Wire Detection: Yes
- Individual Channel Configurable: Yes
- 3-wire RTD Lead Resistance Elimination: Yes
- ESD Protection: +/-4 kV Contact for Each Terminal, and +/-8 kV Air for Random Point
- Intra-module Isolation, Field to Logic: 3000 V$_{DC}$
- Power Consumption: 1.5 W

Available Soon

ZB-2017

Wireless 8-channel Analog Input Module with High Voltage Protection

Analog Input
- Input Channels: 8 Differential
- Input Type: +/-10 V, +/-5 V, +/-1 V, +/-500 mV, +/-150 mV -20 mA ~ +20 mA (Requires Optional External 125 Ω Resistor)
- Resolution: 16-bit/12-bit
- Sampling Rate: Normal Mode: 16-bit, 10 Samples/Sec. (Total) Fast Mode: 12-bit, 60 Sample/Sec. (Total)
- Accuracy: Normal Mode: +/-0.1% of FSR Fast Mode: +/-0.5% of FSR
- Zero Drift: +/-20 μV/°C
- Span Drift: +/-25 ppm/°C
- Common Mode Rejection: 86 dB
- Normal Mode Rejection: 100 dB
- Input Impedance: >1 MΩ
- Over Voltage Protection: 240 V$_{rms}$
- ESD Protection: +/-4 kV Contact for Each Terminal
- Intra-module Isolation, Field to Logic: 3000 V$_{DC}$
- Power Consumption: 1.5 W

7

Related Products   Wireless ZigBee Series

Available Soon

ZB-2017C

Wireless 8-channel Current Input Module with High Common Voltage Protection

Analog Input
- ⊙ Input Channels: 8 Differential
- ⊙ Input Type: +/-20 mA, 0~20 mA, 4~20 mA
- ⊙ Resolution: 16-bit (Normal Mode)/12-bit (Fast Mode)
- ⊙ Sampling Rate: Normal Mode: 16-bit, 10 Samples/Sec. (Total)
  Fast Mode: 12-bit, 60 Sample/Sec. (Total)
- ⊙ Accuracy: +/-0.1% (Normal Mode)
  +/-0.5% (Fast Mode) or better
- ⊙ Band Width: 15.7 Hz (Normal Mode)/78.7 Hz (Fast Mode)
- ⊙ Zero Drift: +/-20 μV/°C
- ⊙ Span Drift: +/-25 ppm/°C
- ⊙ Input Impedance: 125 Ω
- ⊙ Common Mode Rejection: 86 dB min.
- ⊙ Normal Mode Rejection: 100 dB
- ⊙ Common Voltage: +/-200 V$_{DC}$
- ⊙ ESD Protection: +/-4 kV Contact for Each Terminal
- ⊙ Intra-module Isolation, Field to Logic: 3000 V$_{DC}$
- ○ Power Consumption: 1.5 W

Available Soon

ZB-2018

Wireless 8-channel Analog Input Module with High Voltage Protection

Analog Input
- ⊙ Input Channels: 8 Differential
- ⊙ Input Type: +/-15 mV, +/-50 mV, +/-100 mV, +/-500 mV,
  +/-1V, +/-2.5 V, +/-20 mA (Requires Optional
  External 125 Ω Resistor)
  Thermocouple Type J, K, T, E, R, S, B, N, C, L, M
- ⊙ Resolution: 16-bit
- ⊙ Sampling Rate: 10 Samples/Sec. (Total)
- ⊙ Accuracy: +/-0.1%
- ⊙ Input Impedance: 1 MΩ
- ⊙ Over Voltage Protection: 240 V$_{rms}$
- ⊙ Open Thermocouple Detection: Yes
- ⊙ ESD Protection: +/-4 kV Contact for Each Terminal
- ⊙ Intra-module Isolation, Field to Logic: 3000 V$_{DC}$
- ⊙ Power Consumption: 1.5 W

Available Soon

ZB-2024

Wireless 4-channel Voltage/Current Output Module

Analog Output
- ○ Output Channels: 4
- ⊙ Output Type: +/-10 V$_{DC}$, +/-5 V$_{DC}$, 0 V$_{DC}$ ~ +5 V$_{DC}$, 0 V$_{DC}$ ~ +10 V$_{DC}$,
  0 mA ~ 20 mA, 4 mA ~ 20 mA
- ⊙ Resolution: 12-bit
- ⊙ Accuracy: +/-0.1% of FSR
- ⊙ Zero Drift: Voltage: +/-30 μV/°C
- ⊙ Span Drift: +/-25 ppm/°C
- ⊙ Programmable Output Slope: 0.0625 ~ 512 V/Sec.
- ⊙ Voltage Output Capability: 10 mA @ 10 V
- ⊙ Current Load Resistor: 500 Ω
- ⊙ Power-Up and Safe Value: Yes
- ⊙ Intra-module Isolation, Field to Logic: 2500 V$_{DC}$
- ⊙ Power Consumption: 1.5 W

7

Related Products   Wireless ZigBee Series

Available Soon

ZB-2026

Wireless 4-channel Voltage Input, 2-channel Voltage Output and 2-channel Digital Output

Analog Intput
- Input Channels: 4 Differential
- Input Type: +/-10 V, +/-5 V, +/-1 V,
  +/-500 mV, +/-150 mV , -20 mA ~ +20 mA
  (Requires Optional External 125 Ω Resistor)
- Resolution: 16-bit (Normal Mode)/12-bit (Fast Mode)
- Sampling Rate: Normal Mode: 16-bit, 10 Samples/Sec. (Total)
  Fast Mode: 12-bit, 60 Sample/Sec. (Total)
- Accuracy: +/-0.1% (Normal Mode)
  +/-0.5% (Fast Mode) or better

Analog Output
- Output Channels: 2
- Output Type: 0 V_{DC} ~ +10 V_{DC}
- Resolution: 12-bit
- Accuracy: +/-0.1% of FSR
- Programmable Output Slope: 0.0625 ~ 512 V/Sec.
- Voltage Output Capability: 10 mA @ 10 V
- Power-Up and Safe Value: Yes

Digital Output
- Output Channels: 2 (Sink)
- Output Type: Isolated Open Collector
- Max Load Current: 700 mA/Channel
- Load Voltage: 5 V_{DC} ~ 50 V_{DC}

Ordering Information	
ZB-2015 CR	Wireless 6-channel RTD Input Module with 3-wire RTD Lead Resistance Elimination (RoHS)
ZB-2017 CR	Wireless 8-channel Analog Input Module with High Voltage Protection (RoHS)
ZB-2017C CR	Wireless 8-channel Current Input Module with High Common Voltage Protection (RoHS)
ZB-2018 CR	Wireless 8-channel Analog Input Module with High Voltage Protection (RoHS)
ZB-2024 CR	Wireless 4-channel Voltage/Current Module (RoHS)
ZB-2026 CR	Wireless 4-channel Voltage Input, 2-channel Voltage Output and 2-channel Digital Output

Important Note: The ZigBee AIO modules need a ZB-2570 to coordinate the data transmission route, please remember to also order a ZB-2570 when you purchase the ZigBee AIO products.

ZigBee DIO (Built-in Repeater Function)

NEW

ZB-2042

Wireless 14-channel Isolated Digital Output Module

Digital Output
- Output Channels: 14 (Sink)
- Output Type: Isolated Open Collector
- Max Load Current: 700 mA/Channel
- Load Voltage: 5 V_{DC} ~ 50 V_{DC}
- ESD Protection: +/-4 kV Contact for Each Terminal
- Intra-module Isolation, Field to Logic: 3750 V_{rms}
- Power Consumption: 1.7 W

NEW

ZB-2043

Wireless 4-channel PhotoMOS Relay Output and 4-channel Open Collector Output Module

Relay Output
- Output Channels: 4
- Output Type: PhotoMOS Relay, Form A
- Load Voltage: 60 V_{DC}/V_{AC}
- Max. Load Current:
  - 60V/1.0A (Operating Temperature: -25 °C ~ +40 °C)
  - 60V/0.8A (Operating Temperature: +40 °C ~ +60 °C)
  - 60V/0.7A (Operating Temperature: +60 °C ~ +75 °C)
- Turn On Time: 5.0 ms
- Turn Off Time: 0.5 ms

Digital Output
- Output Channels: 4 (Sink)
- Output Type: Isolated Open Collector
- Max Load Current: 700 mA/Channel
- Load Voltage: +5 V_{DC} ~ +50 V_{DC}
- ESD Protection: +/-4 kV Contact for Each Terminal
- Intra-module Isolation, Field to Logic: 3750 V_{rms}
- Power Consumption: 1.5 W

NEW

ZB-2052

Wireless 14-channel Isolated Digital Input Module

Digital Input
- Input Channels: 14
- Wet Contact (Sink/Source): On Voltage Level: +3.5 V_{DC} ~ +30 V_{DC}
  - Off Voltage Level: +1 V_{DC} Max.
- Input Impedance: 3 kΩ, 0.33 W
- Counter:
  - Channels: 14
  - Max. Counts: 16-bit (65535)
  - Min. Pulse Width: 5 ms
  - Max. Input Frequency: 100 Hz
- Intra-module Isolation, Field to Logic: 3750 V_{rms}
- ESD Protection: +/-4 kV Contact for Each Terminal
- Power Consumption: 1.7 W

NEW

ZB-2053

Wireless 8-channel Isolated Digital Input Module with 16-bit Counters

Digital Input
- Input Channels: 8
- Input Type: Isolation, Wet Contact (Sink/Source)
- Input Level: On Voltage Level: +3.5 V_{DC} ~ +30 V_{DC}
  - Off Voltage Level: +1 V_{DC} Max.
- Input Impedance: 3 kΩ, 0.33 W
- Intra-module Isolation, Field to Logic: 3000 V_{DC}
- ESD Protection: +/-4 kV Contact for Each Terminal
- EFT Protection: +/-4 kV for Power Input
- Surge Protection: +/-3 kV for Power Input
- Power Consumption: 1 W Max.

NEW

ZB-2060

Wireless 6-channel Isolated Digital Input and 4-channel Relay Output Module

Digital Input
- Input Channels: 6
- Input Type: Isolation, Wet Contact (Sink/Source)
- Input Level: On Voltage Level: +3.5 V_{DC} ~ +30 V_{DC}
           Off Voltage Level: +1 V_{DC} Max.
- Input Impedance: 3 kΩ, 0.33 W

Digital Output
- Output Channels: 4
- Output Type: Power Relay, Form A
- Contact Rating: 5 A @ (250 V_{AC}/30 V_{DC})
- ESD Protection: +/-4 kV Contact for Each Terminal
- EFT Protection: +/-4 kV for Power
- Surge Protection: +/-3 kV for Power
- Power Consumption: 1.2 W

Ordering Information	
ZB-2042 CR	Wireless 14-channel Isolated Digital Output Module (RoHS)
ZB-2043 CR	Wireless 4-channel PhotoMOS Relay Output and 4-channel Open Collector Output Module (RoHS)
ZB-2052 CR	Wireless 14-channel Isolated Digital Input Module (RoHS)
ZB-2053 CR	Wireless 8-channel Isolated Digital Input Module with 16-bit Counters (RoHS)
ZB-2060 CR	Wireless 6-channel Isolated Digital Input and 4-channel Relay Output Module (RoHS)
Important Note: The ZigBee DIO modules need a ZB-2570 to coordinate the data transmission route, please remember to also order a ZB-2570 when you purchase the ZigBee DIO products.	

ZigBee Repeater

NEW

ZB-2510

ZigBee Repeater
- RF Channels: 16
- Receive Sensitivity: -102 dBm
- Transmit Power: 12 dBm
- Data Encryption: AES-CTR
- Network Topology Support: Star, Mesh and Cluster tree
- Certification: TUV
- Antenna: 2.4 GHz, 3 dBi Omni-Directional antenna
- Power Consumption: 1.5 W

Ordering Information	
ZB-2510 CR	ZigBee Repeater (RoHS)