

iConnect X-Series I/O Module

Simple configurations. Simple flexibility. I/O simply.

A&D
Discover Precision

iConnect X-Series offers the flexibility of EtherCAT® with the simple implementations standard with A&D products.

An evolution in the development of I/O solutions, A&D is offering a plug-n-play solution through our iConnect X-Series I/O modules. Integrating new technology can be a challenge. Many testing facilities focus on several areas and work to implement technology from multiple vendors to complete their setup. At A&D, we have focused on the needs of our customers, working to provide important improvements that are easy to integrate.

The new iConnect X-Series I/O uses EtherCAT for high-performance measurement and control applications. EtherCAT also provides flexibility with a simple and robust architecture. The iConnect X-Series I/O system can be used with A&D's iTest data acquisition and control software as well as any EtherCAT data acquisition system.

The A&D iConnect X-Series modules feature M12 connections for quick connection.

There is a wide variety of M12 compatible cables in various lengths available off the shelf. **Custom wiring at the module end is not required.**

For rack mounting the iConnect X-Series modules, a 14 slot 19" chassis is available. One slot is required for the AD7314-BC EtherCAT bus coupler leaving 13 physical slots available for a combination of 3, 2 or 1 slot modules. Due to the EtherCAT addressing limitation, only 10 actual EtherCAT slave modules can be installed in a single chassis. Alternatively, the X-Series modules are available in a DIN rail form factor. For installation in facilities interface cabinets or other more permanent applications. When used with A&D iTest data acquisition and control software the iConnect **X-Series offers a flexible, high-performance control system for a wide variety of applications including component test, e-motor testing, facilities control, battery test, etc.**



AD7314-R19-UUT Rack Dimensions
483mm W x 133mm (3HU) x 182mm D
(19" W x 5.2" (3HU) x 7.2"D)

Highlights:

- EtherCAT can be used with other systems
- Mix and match functions in the same rack - more flexibility in configurations
- Support for AD7314 and standard Gantner modules - customers can use any Gantner Q.bloxx XE module
- AD7314 modules USE M12 connections - readily available connector and harnesses
- Same I/O specifications as GI Q series XE
- No customer driver to modify
- GI Bench® and TwinCAT® support - use standard GI and Beckhoff® software for configuration
- Rack-mounted chassis (mounts directly to ADT Boom Box, up to 6 chassis

iConnect X-Series - AD7314

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Specifications:

AD7314-A104 TCK	AD7314-A107QC	AD7314-A108QC	AD7314-A109QC	AD7314-A128
8 Thermocouple	4 Ain	8 Ain	4 Aout, 4 Dout, 4 Din	4 Ain HV
±80mV	±10V, ±1V, ±100mV	±10V	±10V, TTL or 24V	±40 V, ±120 V, ±400 V, ±1200 V
24-bit resolution	24-bit ADC	24-bit ADC	16-bit	24-bit
100Hz per channel	20Hz per channel	20Hz per channel	100Hz per channel	100Hz per channel
Type B / E / J / K / L / N / R / S / T / U), voltage (±80 mV)	Voltage, current, resistance, potentiometer, RTD thermocouple, strain gage	Differential voltage, current (with shunt resistor)	Voltage or current (0 - 20 mA), configurable per channel	Channel to channel to power supply and to interface isolation voltage 1200 VDC / 848 VAC rms test voltage 5 kVDC over 1 minute
1 slot	2 slot	2 slot	3 slot	1 slot
(8) mini TC plugs	(4) M12 socket 5 pin	(8) M12 plug 8 pin	(12) M12 socket 8 pin	(8) banana sockets

AD7314-D101QC	AD7314-D104QC	AD7314-D105QC	AD7314-D107QC	AD7314-BC
8 Din, 8 Dout	8 Din	8 Dout	2 to 6 digital inputs	EtherCAT® in/out connections
TTL or 24 VDC	TTL or 24 VDC	12 to 30 VDC (external supply required)	DI: -20 V up to + 20 V SE: 0 V up to +26 V	Converts EtherCAT® LVDS on standard Ethernet
Freq up 1MHz	24-bit ADC	24-bit ADC	16-bit	24-bit
Counter, frequency and PWM	PNP (current sinking)	30 VDC / 500 mA, short circuit proof	Counter, frequency, PWM, differential or single ended	All connections on the back-panel
2 slots	2 slots	2 slots	2 slots	1 slot
(4) M12 socket 5 pin (4) M12 socket 4 pin	(8) M12 socket 8 pin	(8) M12 socket 8 pin	(6) M12 socket, 5 pin	2 X RJ45

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