

Intech[®]
Instruments

Intech Micro **2300 Series**

I/O REMOTE STATIONS

Analogue and Digital Input/Output stations
Examples of connectivity
Mini packs

www.intech.co.nz

Intech Micro 2300 series I/O Remote Stations



Analogue and Digital Input/Output Stations Connects to MicroScan V5 SCADA Software

- Low Cost I/O Remote Stations
- MODBUS RTU with MODBUS TCP option
- MicroScan V5 SCADA software Compatible—Seamless Integration
- Also ideal for use when inputs/outputs are required for a PLC and Modbus comms are available
- Plug-in connectors makes replacement easy
- Programmable Ranges within input type
- 1.0KV or greater Isolation.
- 0.2% Accuracy (12 Bit).
- Compact DIN rail mount Enclosure
- LEDs indicate I/O status plus comms and Power Supply
- Comms Fail Alarm (Optional)
- Power Supply: 24Vdc

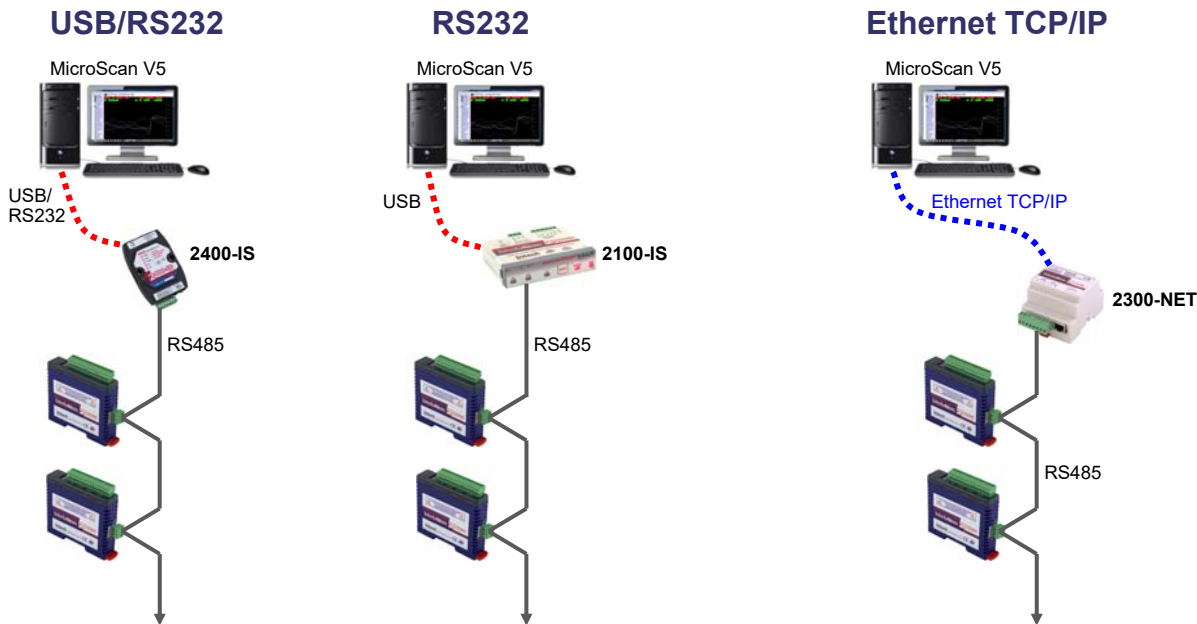
MODEL	DESCRIPTION	
2300-A8II	8 x 4~20mA inputs, Isolated 1.0KV isolation between each input 0~20mA inputs Dip switch selectable - All inputs are set to the same mA 250 ohms input resistance 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 40mA typical	4~20mA inputs Isolated
2300- A8VI	8 x Voltage inputs, Isolated 1.0KV isolation between each input 2~10Vdc inputs Dip switch selectable - All inputs are set to the same Voltage 20 Kohms input resistance 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 40mA typical	Volts inputs Isolated
2300-Tc8	8 x Thermocouple & mV inputs, Isolated 350V peak isolation between each input Programmable inputs type K, J, T, E, N, B, S, R, with CJC Programmable mV inputs 0~50mV, -100~100mV All inputs are set to the same type 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 40mA typical	Thermocouple & mV Isolated
2300-RTD6	6 x RTD inputs, Pt100, Pt1000, Ni120, Ni1000 All inputs are set to the same RTD type 1.5KV isolation between inputs and power supply and comms (RS485) Resolution = 0.1°C / Power Supply = 24Vdc @ 55mA typical	RTD input
2300-MULTI	6 x combination analogue inputs, single ended 2 x RTD inputs (Pt100, Pt1000, Ni120, Ni1000); 2 x 0(4)~20mA inputs <u>OR</u> 2 x 0~10Vdc inputs, 1 x 4~20mA output, 4 x Digital inputs, 2 x Digital outputs 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 70mA typical Using the output types requires an independent and isolated power supply	Combination inputs and Outputs
2300-D16	16 x Digital inputs Input voltage: 12~24Vdc 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 30mA typical	Digital inputs
2300-RO4	4 x Relay outputs Change over contacts Contact rating: 240Vac @ 0.5A 28Vdc @ 1A 1.0KV isolation between inputs and power supply and comms (RS485) One output can be dedicated to Comms Fail Alarm Power Supply = 24Vdc @ 100mA typical	Relay outputs
2300-AO8I	8 x 4~20mA outputs, single ended (all output negatives internally connected) 0~20mA outputs Dip switch selectable - All outputs are set to the same mA 1.5KV isolation between outputs and power supply and comms (RS485) Power Supply = 24Vdc @ 18mA typical. Requires an independent and isolated power supply to power logic outputs = 24Vdc @ 175mA typical.	4~20mA outputs

24Vdc Instrument Quality Power Supply:

PSW-10-F Output Voltage: 24Vdc
Max current: 1.0A continuous
Input Power Supply: 100~264Vac



Examples of Connectivity - RS485 Data Hi-Way



Important: The 2300-XX stations cannot share a data hi-way with the 2100-XX / 2400-XX stations and/or Shimaden Controllers.

Comms converters from a computer to RS485 for communication to the 2300 series stations.

A USB/RS232 to RS485 Converter Isolating

MODEL	DESCRIPTION
2400-IS	USB/RS232 to RS485 Isolating Converter. Complete with: - USB cable (length = 1m). - RS232 cable (length = 2m). Powered via computer USB port.



MODEL	DESCRIPTION
2100-IS-USB	USB to RS485 Isolating converter. Comms baud rate: 9600. Relay output: 1 relay, change over. Rating, 1 amp, 24Vdc. Powered via computer USB port.

USB converter isolating
Alarm for communication failure.



MODEL	DESCRIPTION
2300-NET	Ethernet TCP/IP to RS485 Converter. Isolating. Comms baud rate: 9600. Modbus TCP to Modbus RTU Protocol. Compact DIN rail mount enclosure.
PSW-10-F	Instrument Quality 24Vdc power supply for the 2300-NET. Max Current: 1 Amp continuous. Input power supply: 100~264Vac.

Ethernet TCP/IP to RS485 converter isolating



Note: The 2300-NET is used with the 2300 Series I/O Remote Stations when connecting via Ethernet TCP/IP. For the 2400/2100 Series I/O Remote Stations and Shimaden Controllers via Ethernet TCP/IP use the 2100-NET.

Mini Packs – Complete Chart Recorder Replacement Packages

MINI PACK 8



UP TO 8 CHANNELS OF RECORDING

Remote stations available for the following;
milli-amps, milli-volts, Voltage, Thermocouple, RTD, Combination.
>> Refer pages 2/3

SOFTWARE - Supplied with USB Dongle.

1x **MICROSCAN V5 RECORDER R8**

And **HARDWARE**

1x **ISOLATED AUTO-DETECTING COMMS CONVERTER
USB/RS232 to RS485 {2400-IS}**

1x **INTECH MICRO 2300 Remote Station**

Specify input type when ordering: Voltage / Current /
Thermocouple / RTD / Multi.

c/w 1x PSW-10-F Instrument Quality Power Supply 24Vdc, 1.0A.

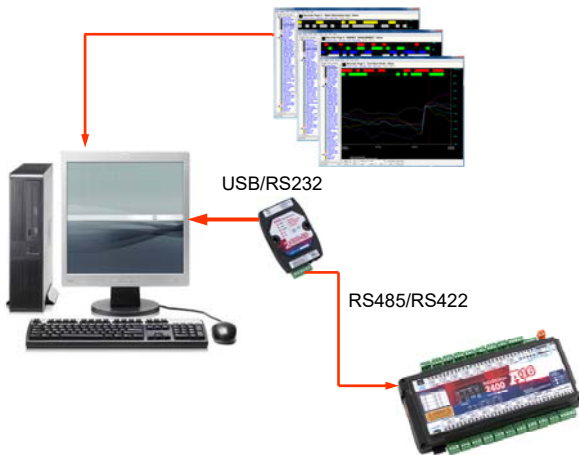
Option 1 - If using 2300-RTD6 (6x RTD inputs).

Option 2 - Using any other 2300 I/O remote station.

Alarms - 2300-RO4 - Comms fail alarm and/or Alarm outputs.

Ethernet - 2300-NET - Connect via Ethernet TCP/IP {no 2400-IS}.

MINI PACK 16



UP TO 16 CHANNELS OF RECORDING

Each input channel can be individually programmed to any of the following:
RTD Pt100 / Pt1000, Thermocouple, milli-amps, milli-volts, Voltage,
Pseudo Digital.

SOFTWARE - Supplied with USB Dongle.

1x **MICROSCAN V5 RECORDER R16**

And **HARDWARE**

1x **ISOLATED AUTO-DETECTING COMMS CONVERTER
USB/RS232 to RS485/RS422 {2400-IS}**

1x **INTECH MICRO 2400-A16-I16 Remote Station**

Ethernet - 1x 2400-A16-I16-NET - Connect via Ethernet TCP/IP {no 2400-IS}.

MINI PACK 32



UP TO 32 CHANNELS OF RECORDING

Each input channel can be individually programmed to any of the following:
RTD Pt100 / Pt1000, Thermocouple, milli-amps, milli-volts, Voltage,
Pseudo Digital.

SOFTWARE - Supplied with USB Dongle.

1x **MICROSCAN V5 RECORDER R32**

And **HARDWARE**

1x **ISOLATED AUTO-DETECTING COMMS CONVERTER
USB/RS232 to RS485/RS422 {2400-IS}**

2x **INTECH MICRO 2400-A16-I16 Remote Station**

Ethernet - 2x 2400-A16-I16-NET - Connect via Ethernet TCP/IP {no 2400-IS}.