



Intech INSTRUMENTS LTD

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 Software



- Low Cost I/O Remote Stations
- MODBUS RTU with MODBUS TCP option
- MicroScan V5 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

>> www.intech.co.nz/2300

MODEL	DESCRIPTION	
2300-A8I	8 x 4~20mA inputs, single ended (all input negatives internally connected) 0~20mA inputs programmable / 250 ohms input resistance 1.5KV isolation between inputs and power supply and comms (RS485) Power Supply = 24Vdc @ 30mA typical Requires an independent and isolated power supply to power logic inputs.	4~20mA inputs Commoned
2300-A8II	8 x 4~20mA inputs, Isolated 1.0KV isolation between each input 0~20mA inputs programmable / 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 0~10V or 2~10V inputs programmable / 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 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, 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, 2 x 4~20mA inputs, 2 x Voltage 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	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

24Vdc Power Supply Options:

PSW-2-F Output Voltage : 24Vdc
Max current : 200mA continuous
Input Power Supply : 85~265Vac/dc

>> www.intech.co.nz/psw-2-f

PSW-10-X Output Voltage : 24Vdc
Max Current : 1 Amp continuous
Input Power Supply : 100~264Vac/dc

>> www.intech.co.nz/psw-10

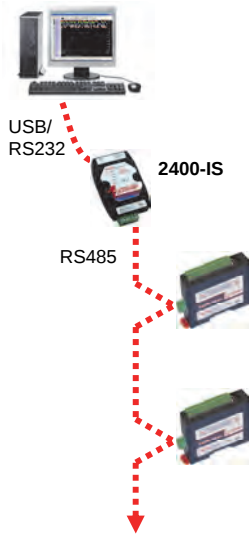


PSW

Examples of Connectivity - RS485 Data Hi-Way

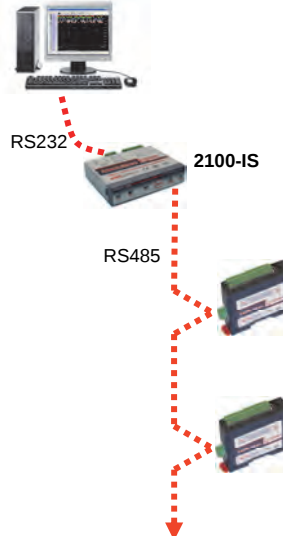
USB/RS232

MicroScan V5



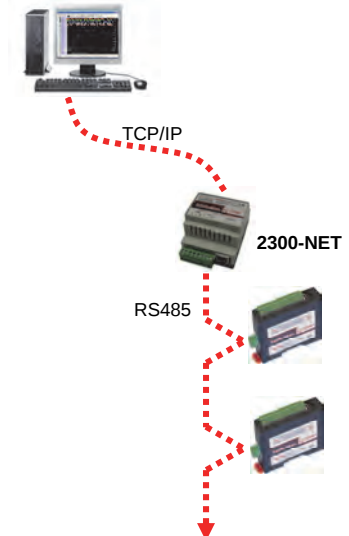
RS232

MicroScan V5



TCP/IP

MicroScan V5



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.

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.



2400-IS

>> www.intech.co.nz/2400-is

MODEL	DESCRIPTION
2100-IS	RS232 to RS485 Isolating converter. <u>Comms baud rate:</u> 9600 <u>Relay output:</u> 1 relay, change over. Rating, 1 amp, 24Vdc. <u>Power Supply:</u> 9V plug pack (supplied with 2100-IS). Internal audible and relay output alarm for communication failure.

**RS232 converter isolating
Alarm for communication failure.**



2100-IS

>> www.intech.co.nz/2100-is

- The 2300-NET converts TCP/IP to RS485 for communication to the 2300 series stations.

MODEL	DESCRIPTION
2300-NET	Ethernet TCP/IP to RS485 Converter. Isolating. <u>Comms baud rate:</u> 9600 Modbus TCP to Modbus RTU Protocol Compact DIN rail mount enclosure
PSW-2-F	If you require a 24Vdc power supply for the 2300-NET

TCP/IP to RS485 converter isolating



2300-NET

>> www.intech.co.nz/2300-net

Minipacks – 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.

NEW!

>> Refer pages 2/3

SOFTWARE - Supplied with USB Dongle

1x **MICROSCAN V5 RECORDER LITE 8**

And HARDWARE

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

1x **INTECH MICRO 2300 Remote Station**

c/w PSW-2-F Power Supply 24Vdc, 200mA.

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

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

Option 2 - If using 2300-A8I (8x 4~20mA inputs Non-isolated)

Note: Option 2 (2300-A8I) requires an independent and isolated power supply to power logic inputs.

Option 3 - Using any other 2300 I/O remote station

Upgrade - Comms fail alarm and/or Alarm outputs (add 2300-RO4 station)

MINI PACK 16



UP TO 16 CHANNELS OF RECORDING

Each input channel can be individually programmed to any of the following:
Pt100 or* Pt1000, Thermocouple, milli-amps, milli-volts, Voltage.

SOFTWARE - Supplied with USB Dongle

1x **MICROSCAN V5 RECORDER LITE 16**

And HARDWARE

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

1x **INTECH MICRO 2100-A16-X**

Upgrade - 1x 2100-A16-NET - Connect via Ethernet TCP/IP.

MINI PACK 32



UP TO 32 CHANNELS OF RECORDING

Each input channel can be individually programmed to any of the following:
Pt100 or* Pt1000, Thermocouple, milli-amps, milli-volts, Voltage.

SOFTWARE - Supplied with USB Dongle

1x **MICROSCAN V5 RECORDER LITE 32**

And HARDWARE

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

2x **INTECH MICRO 2100-A16-X**

Upgrade - 2x 2100-A16-NET - Connect via Ethernet TCP/IP.

* 2100-A16 RTD inputs must be either Pt100 or Pt1000 not a mixture.