

## PLC Analogue Input Expansion

Two 16 channel input Multiplexers to choose from:

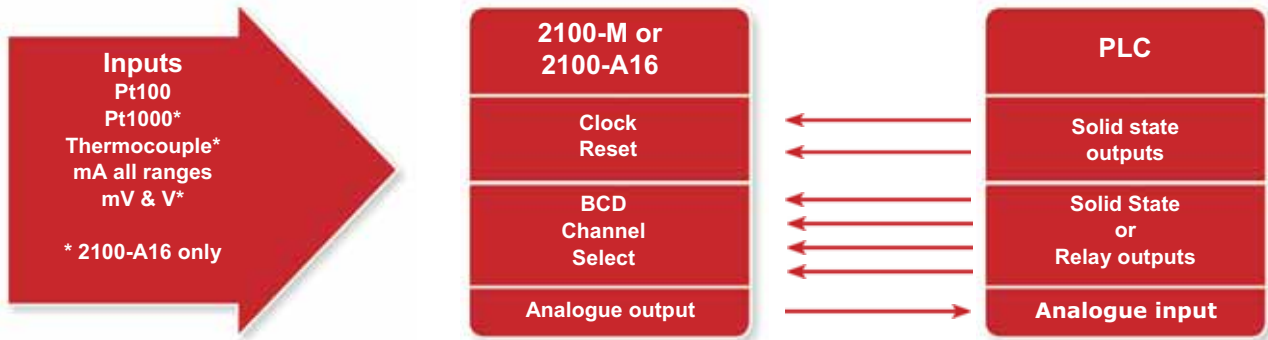
**1. 2100-M analogue input multiplexer.**

16 analogue inputs.  
 High accuracy 0.1%.  
 Field programmable ranges within each model.  
 2100-M-R = RTD any span.  
 2100-M-I = mA any span.

**2. 2100-A16 intelligent multiplexer.**

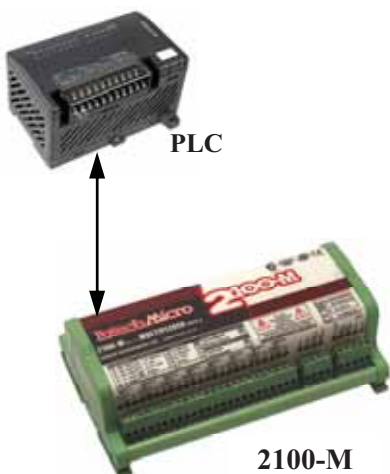
16 individually configurable inputs.  
 Pt100 or Pt1000\*.  
 Thermocouple most types/most spans.  
 mA all ranges.  
 mV / V  
 Modbus RTU / Modbus TCP.

Channel select by PLC is the same for both multiplexers:



MODEL	PLC CHANNEL SELECT		COMMUNICATIONS			PROGRAMMABLE INPUTS		POWER SUPPLY	
	CLOCK-RESET	BCD	MICROSCAN RS485 RS422	MODBUS RTU (RS485)	MODBUS TCP (Ethernet Option)	UNIVERSAL INPUTS	FIXED INPUT TYPE PROGRAMMABLE RANGE	12/24Vac/dc	110/240Vac
2100-A16	✓	✓	✓	✓	✓	✓		✓	✓
2100-M	✓	✓					✓	✓	✓

### Analogue Input Multiplexer



- ◆ 16 single ended inputs.
- ◆ Field programmable input ranges.
- ◆ Field programmable output signals.
- ◆ 0.1% accuracy.
- ◆ Universal power supply:  
 Standard: 85~264Vac/dc. or  
 23~90Vdc. (Field selectable).  
 Optional: 10~28Vac/dc.
- ◆ Inputs:  
 RTD.  
 Milli-amps.
- ◆ Channel stepping mode, 'clock/reset' or 'binary', is field programmable.
- ◆ DIN rail mount.

MODEL	DESCRIPTION	PRICE
2100-M-R	<b>RTD inputs.</b> Standard input DIN Pt100, others by request. Programmable input ranges within -200~0~20 to 600°C. Programmable output: 8 ranges within 0~20mA and 0~10Vdc.	\$840.00
2100-M-I	<b>Milli-amp inputs.</b> Programmable input ranges within 0~2 to 20mA. Programmable output: 8 ranges within 0~20mA and 0~10Vdc.	\$840.00
OPTION		
2100-M-x-L	<b>Low voltage universal power supply.</b> 10~28Vac/dc.	\$75.00

[www.intech.co.nz/2100-m](http://www.intech.co.nz/2100-m)

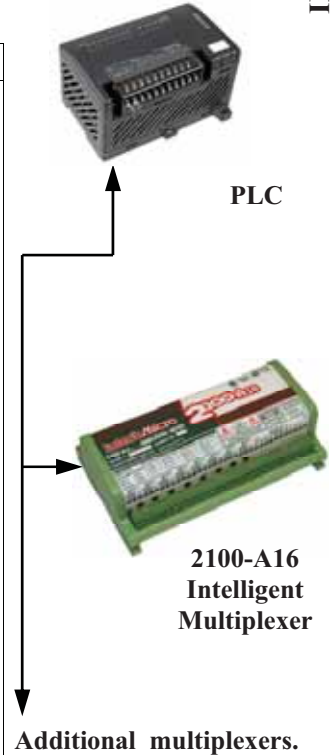
**Please Note:** Modbus Protocols are NOT available with the 2100-M.

If you require a multiplexer with Modbus Protocols please view the 2100-A16 on page 19 >>

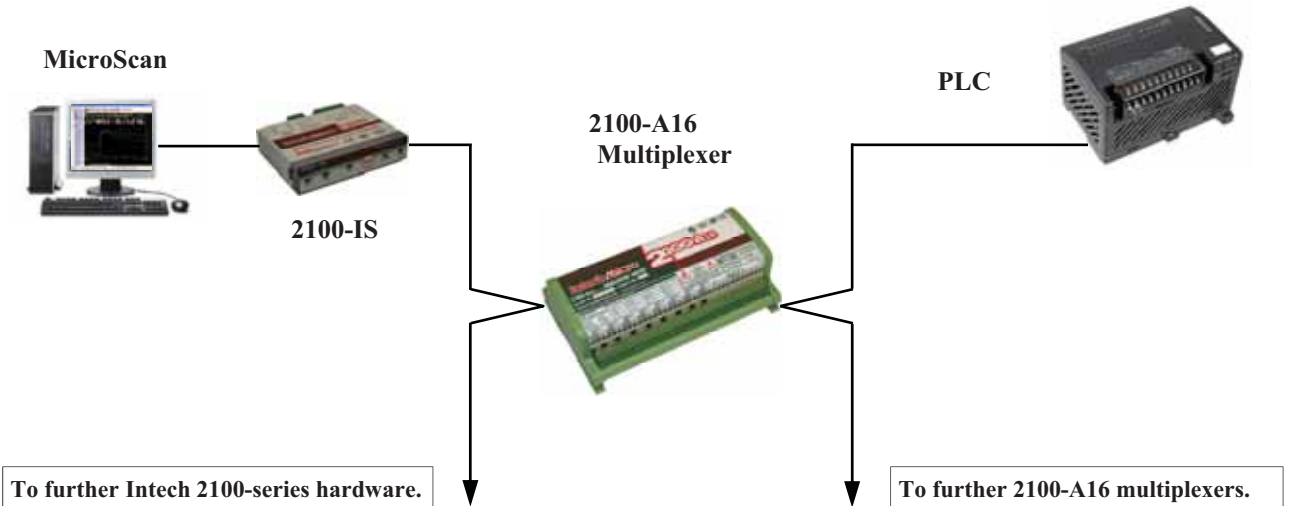
- ◆ Each input is user selectable in MicroScan software to any of the following:  
Thermocouple, RTD (Pt100/Pt1000), mA, mV, volts.
- ◆ 16 analogue differential inputs, (RTD single ended).
- ◆ 2 relay outputs, for control or alarm functions.
- ◆ 2 analogue outputs.
- ◆ 4 isolated digital inputs.
- ◆ Comms – RS485 or RS422 selectable, RS232 optional. Modbus.RTU Standard.
- ◆ Channel selection:  
‘binary’ or ‘clock/reset’ (selectable).
- ◆ 0.1% accuracy.
- ◆ DIN rail mount.

[www.intech.co.nz/2100-a16](http://www.intech.co.nz/2100-a16)

MODEL	DESCRIPTION	PRICE
2100-A16	<p><b>Intelligent analogue input multiplexer. 16 channels.</b></p> <p><u>Analogue input ranges:</u> scaled within the following span limits:                      mV. 0~25mV to ±500mV.                      volts. 0~1V to ±15V dc.                      mA. 0~1mA to ±100mA. (4~20mA default).                      RTD. 0~25°C to -200~850°C. Pt100/Pt1000 selectable.                      RTD inputs must be either Pt100 or Pt1000 not a mixture.                      Thermocouple. K, J, N, T, R, S, B, E, with CJC.                      Range must be within -200~0~1800°C.</p> <p><u>Resolution:</u> 16 bit  <u>Differential:</u> 18 volts maximum.  <u>Power supply:</u> 85~264Vac/dc or 23~90Vdc, selectable.                      10~28Vac/dc, optional.</p> <p><b>PLC control</b>  <u>Channel select:</u> Clock/reset or binary selectable.  <u>Analogue output:</u> 1 only, 4~20mA, 0~20mA, selectable.                      0~10Vdc, 2~10Vdc. Factory option.</p> <p><b>Computer control</b>  <u>Analogue output:</u> 1 only, 4~20mA, 0~20mA, selectable.                      0~10Vdc, 2~10Vdc. Factory option.</p> <p><u>Relay outputs:</u> 2 only, N/O contacts.                      Rating, 1 amp 30Vac/dc.</p> <p><u>Comms:</u> Isolated RS485 (2 wire), RS422 (4 wire), selectable.                      RS232, optional. Modbus.RTU standard.</p> <p><u>Baud rate:</u> 9600, 4800, 2400, selectable.</p>	\$1348.00
<b>OPTIONS</b>		
2100-A16-RS232	RS232 option fitted to 2100-A16. (Supplied with 5 metres cable).	N/C
2100-A16-L	Power supply of 10~28Vac/dc fitted.	\$75.00



The MicroScan system and the PLC can access the 2100-A16 multiplexer at the same time.



## IntechMicro 2300 series I/O Remote Stations & PLC

Stand-alone Analogue and Digital Input/Output stations - low cost - 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.
- ◆ 1.0 kV 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](http://www.intech.co.nz/2300)

MODEL	DESCRIPTION	PRICE	
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.	\$395.00	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.	\$575.00	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.	\$575.00	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. 1.5KV isolation between inputs and power supply and comms (RS485). Power Supply = 24Vdc @ 40mA typical.	\$575.00	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.	\$455.00	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.	\$575.00	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.	\$300.00	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.	\$285.00	Relay outputs
<b>24Vdc Power Supply Options:</b>			
PSW-2-F	Output Voltage: 24Vdc. Max current: 200mA continuous. Input Power Supply: 85~265Vac/dc.	<a href="http://www.intech.co.nz/psw-2-f">www.intech.co.nz/psw-2-f</a>	\$98.00
PSW-10-X	Output Voltage: 24Vdc. Max Current: 1 Amp continuous. Input Power Supply: 100~264Vac.	<a href="http://www.intech.co.nz/psw-10">www.intech.co.nz/psw-10</a>	\$188.00



PSW