PM180 Series

6-channel Modbus Temperature Indicator with Data Logging

- RS485 Modbus Master

- Compatible with PyroBus and PyroMini infrared temperature sensors with RS485 Modbus output

- Configure, display and log data and alarms from up to 6 sensors simultaneously or individually

- MicroSD Card stores up to 1 year of data (with 2 GB card)

- Touch screen with backlight

- Scheduled and manual logging start/stop

- Relay alarms with ICP DAS M-7061 (not included)

- Analogue outputs with ICP DAS M-7024 (not included)

- Temperature chart displays data from 2 channels simultaneously

- CE marked and RoHS compliant

- Isolated Modbus slave version available

GENERAL SPECIFICATIONS

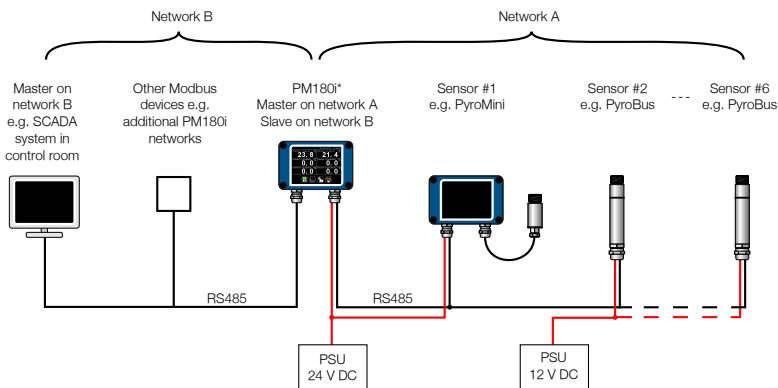|	
Display	2.83" (72 mm) resistive touch TFT, 320 x 240 pixels, backlit
Supply Voltage	10 to 30 V DC
Maximum Current Draw	100 mA
Ambient Temperature Range	0°C to 60°C
Relative Humidity	Maximum 95%, non-condensing
Configurable Parameters (global)	Temperature units, date and time, data logging, graph channels, alarm logging
Configurable Parameters (per channel)	Signal processing, emissivity setting, reflected energy compensation, alarms,
Alarm Configuration	12 alarms (2 per sensor) with adjustable level, individually configurable as HI or LO.
Temperature Units	°C or °F selectable
Temperature Resolution	0.1°
Signal Processing	Average, peak hold, valley hold, minimum, maximum
Display Sample Period	120 ms per sensor (720 ms in total for 6 sensors)

DATA LOGGING

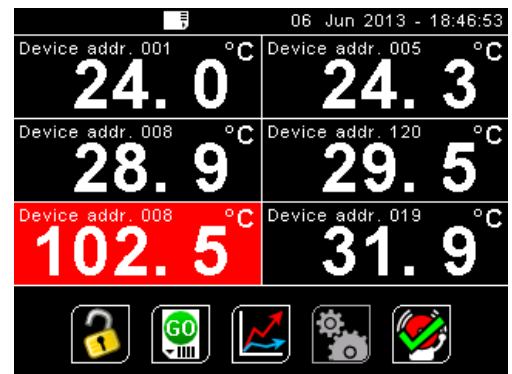|	
Logging Interval	1 to 86,400 seconds (1 day)
MicroSD Card	Max. capacity: 32 GB (not included)
Internal Clock Battery	1 x BR 1225 3V (not included)
Variables Logged	Target temperature, sensing head temperature, alarm events
File Format	.csv (can be imported to Excel)
Configurable Parameters	Sample period, number of samples, scheduled start date and time

MECHANICAL SPECIFICATIONS

Dimensions	98(w) x 64(h) x 36(d) mm excluding cable glands
Weight	280 g

EXAMPLE BUS LAYOUT

* PM180i is suitable where the network of sensors (network A above) is part of another RS485 Modbus network (network B).
  PM180 is suitable where the network of sensors (network A) is standalone.

Intuitive touch screen interface

Display, chart and configure all 6 channels individually or simultaneously. The display for each channel turns red in an alarm condition. Temperature data and alarm events may be logged to a MicroSD Card (not supplied).

MODEL NUMBERS

PM180	6-channel Modbus display/logger without isolation
PM180i	PM180 with 2500 V RMS isolation between master and slave

ACCESSORIES

PM180MA	AC adapter
MSD	2 GB MicroSD Card
M-7061	12-channel relay output module
M-7024	4-channel voltage or current analogue output module