PM180 Series
6-channel Modbus Pyrometer Hub with Data Logging

- Compatible with PyroBus and PyroMini infrared temperature sensors with RS485 Modbus interface
- Operates as Modbus master and isolated Modbus slave
- Configure, display and log data and alarms from up to 6 sensors per PM180 unit, 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

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, Modbus address

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)
Compatible Sensor Types
PyroBus (all models), PyroMini (-BB and -BRT models)

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
**PM180 AS MODBUS MASTER**

- Modbus Master
- RS485
- PM180
- Sensors #1 to #6 - any of the following types:
  - Optional ICP DAS output modules
- M-7061 relay output module
- M-7024 analogue output module
- Modbus Master e.g. SCADA system in control room
- Other Modbus devices

**PM180 AS MODBUS SLAVE**

- Up to 6 sensors and 2 output modules
- Optional ICP DAS output modules
- Each PM180 is a slave device on the main network and the master on each network of sensors.

**Sensors**
- Up to 6 sensors and 2 output modules
- PyroMini with touch screen (model-BRT)
- PyroMini without screen (model-8B)
- PyroBus (any model)

**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 chart**
- Display temperature data from two channels in a scrolling graph.

**Password-protected settings**
- Configure options for each sensor and the PM180 itself via the touch screen interface.

**Data logging**
- Temperature data and alarm events may be logged to a MicroSD Card (not supplied).

**MODEL NUMBERS**
- PM180
  - 6-channel Modbus display/logger

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