

# AutoMet 580 Data Collection Platform

## Flexible - Powerful - Reliable

Our AutoMet 580 Collection Platform is a complete data logger with front panel display which accepts input from any Met One standard sensors, AutoMet sensors and Met One digital serial sensors. Featuring Ethernet and MODBUS connectivity, the AutoMet output is compatible with our COMET, Air Plus and WeatherView Software.

As always, Met One Instruments, Inc. provides your AutoMet based weather stations pre-wired, preprogrammed and pre-tested at no extra charge to get your site up and running faster.

### New Features:

- **Powerful connectivity:**  
Ethernet, MODBUS, 12 analog outputs, USB, RS-232C, RS-485
- **Statistical calculations:**  
Avg, min, max, delta, STD DEV, dewpoint & more
- **Matched pyranometer inputs:**  
For global horizontal & plane of array measurements
- **PT-100 platinum temperature inputs:**  
For ultra-accurate and wide range temperature measurements.

### Shipped Ready To Install:

As always, Met One Instruments, Inc. provides your AutoMet based weather stations pre-wired, preprogrammed and pre-tested at no extra charge to get your site up and running faster.



AutoMet 580 Data Collection Platform

# AutoMet 580 Data Collection Platform

---

## Specifications

### Analog Sensor Inputs

8 single ended 0-2.5 or 0-5 VDC, with Auto ID sensor option.  
2 24BIT matched millivolt level solar radiation sensor inputs.  
3 channels PT-100 RTD temperature inputs. 24BIT, 4-wire.

### Counter Inputs

2 wind speed counters (frequency selectable as low range, high range, or low AC millivolt)  
1 rain gauge channel (de-bounced switch closure)

## Specifications

### Analog Sensor Inputs

8 single ended 0-2.5 or 0-5 VDC, with Auto ID sensor option.  
2 24BIT matched millivolt level solar radiation sensor inputs.  
3 channels PT-100 RTD temperature inputs. 24BIT, 4-wire.

### Counter Inputs

2 wind speed counters (frequency selectable as low range, high range, or low AC millivolt)  
1 rain gauge channel (de-bounced switch closure)

### Digital Sensor Inputs

1 digital sensor, up to 8 parameters. RS232 or RS485.  
Supported Met One Instruments, Inc. digital sensors include but are not limited to:  
AIO 2  
MSO-232  
597  
TACMET II

### Voltage Outputs

12 voltage output channels  
16 bits unipolar  
5.000VDC full scale  
(Can be scaled to 1.000 or 2.500 VDC full scale)  
+/- 4 millivolts accuracy (of expected reading).

### Alarm Outputs

2 alarm channels with N.O. relay contacts  
(Max. power 24 VDC at 20 mA)

### Communication

Ethernet serial port, 1200-115200 baud  
(Default 9600), ASCII, N,8,1  
USB for computer communications; shared port with Main RS-232C port  
RS-232C main serial port, 1200-115200 baud  
(default 9600), ASCII, N,8,1  
Printer or computer RS-232C (COM2), 1200-115200 baud  
(default 9600), ASCII, N,8,1;  
Digital sensor RS232 9600 baud fixed

RS-485 output or digital sensor input, 9600 baud  
RS-232 Extra port 1200-115200 baud

### Communication Protocols

MODBUS  
7500 MetRecord protocol for digital sensors  
UIM serial report string

### Log Channels

16 logging channels (combination of digital and analog measurements, and calculated values).

### Logging Data Capacity

1min data 7.2 days  
5min data 36 days  
10min data 72 days  
15min data 108 days  
30min data 216 days  
60min data 433 days (1.2 years)

### Power Requirement

15VDC  $\pm$  20%  
50 mA or less (display off)  
125mA (display on)

### Power Source

120-240VAC, 50-60Hz to 12VDC power supply (included)  
Solar panel array and battery (optional)  
Battery and AC powered charger (optional)

### Display

Backlit LCD with auto time-out  
40 character width  
8 lines

### Keypad

Four operation selection keys  
Four motion selection keys  
Four function selection keys

### Environmental

REV MAR. 2018

