



**Met One Instruments, Inc.**

## MODEL 136 MultiMet Interface Module

### Features:

- **8 Analog Inputs / 12 Analog Outputs**
- **3 Met One Digital Sensor Inputs – MET or AIR Sensors**
- **Data logging**
- **Multiple Serial Outputs**
- **MODBUS RTU**
- **16-BIT Resolution**
- **Fully Field Configurable / Modifiable**
- **Economical**

Met One Instruments Model 136 MultiMet Interface Module is designed to be easily and quickly connected to any of our meteorological sensors<sup>1</sup> and selected particulate AIR sensors. Replacing our 131 Series MultiMet Translators and our legacy Universal Interface module (UIM), the 136 outputs data in both analog and digital formats.

The 136 features 12 independent, 16-Bit, voltage output channels. This allows the 136 to function as a powerful, user-configurable signal translator for direct connection to a variety of other recording systems, data loggers, PLC's and DCS's. Serial output formats include USB, RS-232 or RS-485 serial (ASCII), MODBUS RTU and UIM serial report string (ASCII). Analog outputs include 0-1, 0-2.5, 0-5 VDC, and 4-20 mA isolated current loop with our optional DIN rail mount, single channel transmitters, P/N 510695.

User configurable statistical calculations include Averages, Min, Max and Delta Temperature, Standard Deviation, Gusts and Dew Point. There are also two alarm outputs that can be used as either a single alarm or combined in a AND or OR logic output.

The 136 is compatible with simple terminal software for interrogation, data capture data collection.

<sup>1</sup> Not compatible with Platinum RTD Temperature Sensors



For automatic data collection Met One's AIR PLUS software is used. The 136 is supplied with our COMET II software.

Communication options, purchased separately, include: network interface, cellular data modem, and radio. Cloud data service is also available. Real Time Data can be displayed by running our WeatherView Software on a PC or Laptop. WeatherView and also provide a Web Page compatible display for viewing current weather data values.



## SPECIFICATIONS

### Analog Sensor Inputs

- 8 single ended 0-2.5 or 0-5 VDC user selectable with Auto ID Sensor option.
- 2 Millivolt amplifiers (x10 and x100 Solar with selectable 100-ohm loads)

### Special Input

- 2 Frequency Counters (Wind Speed frequency selectable as low range, high range, or low millivolt)
- 1 Rain Gauge Channel (De-bounced switch closure with pull-up resistor to 5 volts)

### Digital Sensor Inputs

- 8 Digital Sensors, or 16 channels maximum (RS232 on ADA port or RS485 on RS485 port)
- Supported Met One Instruments' Digital Sensors (include but are not limited to):
  - o AIO 2                                      Sonic Weather Station
  - o MSO    5 Parameter Weather Station
  - o 597/598                                      Temperature/Relative Humidity/Pressure Sensor
  - o NPM2     Network Particulate Monitor
  - o ES-642                                         Remote Dust Monitor
  - o TACMET II                                    Military Sonic Weather Station

### Voltage Outputs

- 12 Voltage Output Channels
- 16 Bits Unipolar
- 5.000 VDC full scale (or 1.000 or 2.500 VDC full scale) +/- 4 millivolts accuracy (of expected reading).  
Uncompensated for signal cable voltage gradient.

### Alarm Outputs

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

### Communication

- Main RS-232C 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
- ADA / Digital Sensor RS232 9600 Baud Fixed
- RS-422/485 output or Digital Sensor input, 9600 Baud
- RS-232 Extra Port 1200-115200 Baud
- USB for computer communications; shared port with Main RS-232C Port

### Protocol

- 7500 Met Record Protocol for Digital Sensors and Serial Communications
- UIM Serial Report String
- MODBUS
- Comet Cloud Services

### Log Channels

- 8 sensor logging channels (Combination of digital and/or analog)
- Averages from 1 to 60 Minutes
- Max/Min Values
- Dew Point
- Delta Temperature
- Sigma (Yammartino Method)
- Rain
- Battery Voltage
- Gust (3 Second average)

### Logging Data Capacity

- 1Min data 7.2 days
- 5Min data 36 days
- 10Min data 72 days
- 15Min data 108 days
- 30Min data 216 days



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60Min data 433 days (1.2 years)

**Power Requirement**

12VDC  $\pm$  20%

50 mA or less

**Weight**

2 lbs. (0.91 Kg)

**Dimensions**

11.5 x 65 x 2.5 inches (292 x 165 x 63.5 mm)

**Mounting Holes**

1 Inch Centers at 5" x 11"

**Available for configuration (All or Separately):**

8 Analog Inputs, Rain gauge Input (1), Wind or pulse Inputs (2), 12 Analog Outputs, 2 Alarm Outputs. Data logger with 1 to 60-minute Average Interval, Gust and Sigma Calculation, Delta Temperature.

RS-485 for connection to Met One Instruments' Digital and 7500 Format based sensors.

**Software Compatibility:**

Comet II (Included)

Air Plus

WeatherView

Any Serial data capture program (Logger has internal menu)

**OPTIONS**

- Point to point radio
- Cellular data link
- Comet Cloud Service
- Serial data server (Network Connection),
- Stevens GOES Radio
- AC/DC Power supply
- Internal battery backup
- Solar Power Systems.