

# Broadband Meteorological Measurement Systems



**MET4**

**MET4A  
Fan-Aspirated**

## PERFORMANCE:

- Pressure Accuracy: Better than  $\pm 0.08$  hPa
- Temperature Accuracy:
  - MET4A (Fan-Aspirated) Better than  $\pm 0.1^\circ\text{C}$
  - MET4 Better than  $\pm 0.5^\circ\text{C}$
- Relative Humidity Accuracy:  $\pm 2\%$  at  $25^\circ\text{C}$

## STANDARD FEATURES:

- Data Logging
- Airport Barometric Functions
- Simple Plug & Play Installation
- Integral Environmental Enclosure
- Instrument Status LED Indicators
- RS-232/485 Bi-Directional Interface
- Nano-Resolution Providing One-Part-Per Billion Resolution

## QUALITY AND STANDARDS:

- CE Compliant
- NIST Traceable
- ISO 9001:2008 Quality System

## APPLICATION AREAS:

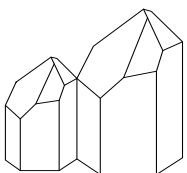
- GPS Meteorology (Precipitable Water Vapor)
- Crustal Observation - Tectonic Research
- Weather and Climate Research Studies
- Surface and Maritime Weather Observation
- Ground Based Altimeter Setting Indicators

The MET4 and fan-aspirated MET4A Meteorological Measurement Systems provide high accuracy data from barometric pressure, temperature, and relative humidity sensors. Pressure resolution is better than 1 microbar with a total accuracy of better than  $\pm 0.08$  hPa over the extended barometric range of 500 to 1100 hPa. In the Nano-Resolution mode, the MET4 and MET4A has a resolution of one-part-per billion providing the ability to detect natural atmospheric signals such as Micro-Baroms and other atmospheric noise. Temperature resolution is better than 0.01 degrees C.

These fully-integrated systems are housed in environmental enclosures allowing indoor or outdoor mounting. Installation hardware and software are included and optional interface cabling is available. The MET4 solar radiation shield protects the temperature and humidity sensors from precipitation and solar radiation. Both the MET4 and fan-aspirated MET4A utilize a high performance pressure port to reduce dynamic pressure errors caused by wind.

Microprocessor-based electronics provide fully temperature compensated and linearized outputs via a bi-directional RS-232/485 interface. This serial interface allows complete remote configuration and control of all operating parameters including resolution, sample rates, choice of engineering units, integration time, and sampling commands. The airport barometric functions include field pressure, station pressure, altimeter setting, sea-level pressure, density altitude, pressure altitude, Q Codes - QNH & QFE and WMO pressure tendency codes. The internal data logger can store over 200,000 high resolution data points.

The DigiQuartz<sup>®</sup> barometer used in the MET4 and MET4A has a 3-year stability warranty of better than 0.1 hPa per year and includes a limited 5-year warranty with the first 2-years covered at 100%. The System includes a limited one-year warranty. The RH and temperature probe is field replaceable and barometer performance can be verified in the field using the Paroscientific Model 765-16B Portable Pressure Standard and DigiPort High-Performance Pressure Port.



**Paroscientific, Inc.**  
DigiQuartz<sup>®</sup> Pressure Instrumentation

MANAGING RISK



