



## MIDDS-T, TACMET II SYSTEM

### FEATURES:

- **No Moving Parts**
- **Low Power**
- **Internal Flux-Gate Compass**
- **Five Variables Measured**
- **Complete System in Single Case**
- **Display Software Included**

The P/N 102449, MIDDS-T TACMET II system, is a complete portable weather station featuring Climatronics unique no moving parts Sonimometer™ wind sensor.

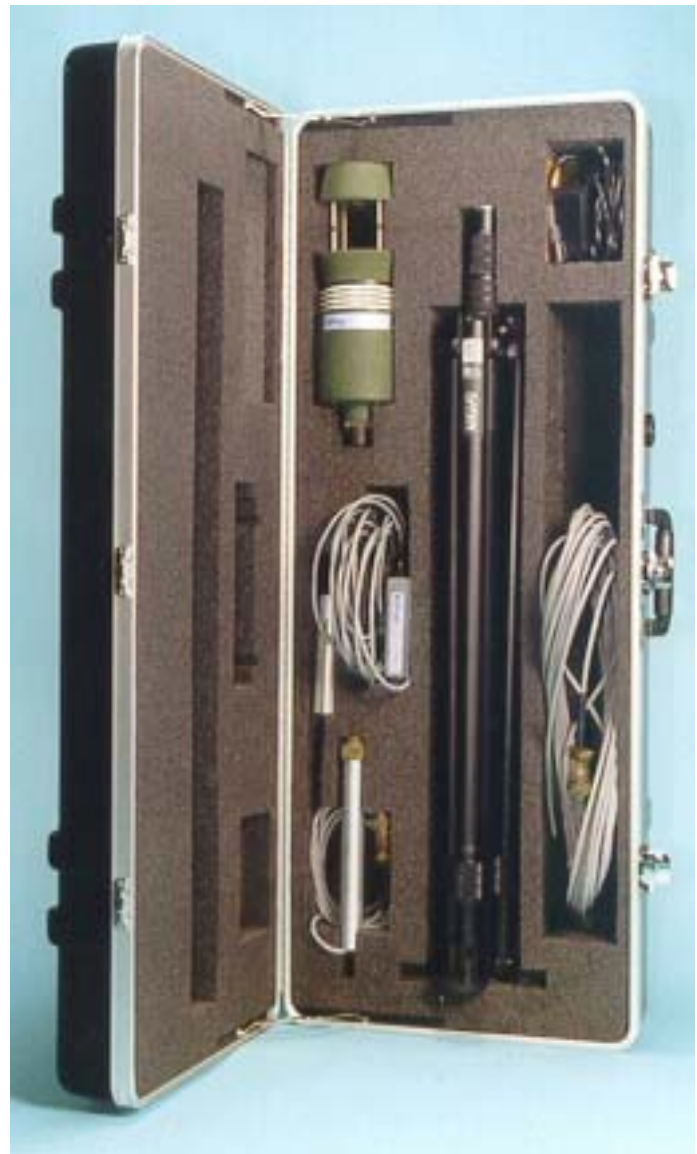
The system measures wind speed, wind direction, air temperature, relative humidity and barometric pressure, and requires very little power (50mA @12 Vdc) for operation. The system comes complete with a tripod for mounting the TACMET II weather sensor, a sensor mount, a transit case for system transportation, 50, 100 and 150-foot extension cables, a power and RS-232C serial data interface, an AC/DC power converter and Climatronics "WeatherView" PC data display software. (Please refer to the 102445 "WeatherView" data sheet for additional details.) Data are transmitted as RS-422/485 and converted to RS-232C for PC serial port input.

An internal flux-gate compass automatically references the wind direction data to magnetic north. Therefore, no mechanical alignment of the sensor is required at deployment, except to assure that the sensor is within 10° of vertical.

The system is designed for maximum durability, portability, and utility, making it uniquely applicable for rapid deployment and use by one person under adverse conditions. The sensor may be mounted on the system tripod or a vehicle mast.

The system is also supported by a number of accessories and options such as solar power, spread-spectrum RF telemetry, cellular phone connection, additional measurement variables, hand-held displays; and depot repair and calibration fixtures.

The TACMET II weather sensor supplied with the MIDDS-T, TACMET II system has an aluminum housing and special filtering for EMI/RFI resistance. The sensor color is CARC-383 green.



## SPECIFICATIONS:

### PERFORMANCE:

#### Wind Speed

Range 0-65 m/s (0-145 mph)  
Accuracy \*  $\pm 0.5$  m/s (1.0 mph) or 5%  
Resolution 0.1 m/s (0.22 mph)

#### Wind Direction

Range 0-360°  
Accuracy \*  $\pm 3^\circ$  @ wind speed > 2.2m/s (5 mph)  
Resolution  $\pm 1.0^\circ$

#### Compass

Accuracy  $\pm 2^\circ$

#### Temperature

Range -40°C to +60°C (-40°F to 140°F)  
Accuracy  $\pm 2.0^\circ\text{C}$  ( $\pm 3.6^\circ\text{F}$ ) @ ws>2.0 m/s (4.5 mph)  
Resolution  $\pm 0.1^\circ\text{C}$

#### Relative Humidity

Range 0 - 100 percent  
Accuracy  $\pm 3$  percent  
Resolution  $\pm 1.0$  percent

#### Pressure (P/N 102298)

Range 600 - 1100 hPa  
Accuracy  $\pm 0.65$  hPa  
Resolution  $\pm 0.1$  hPa

### ELECTRICAL:

Signal Output RS-422/RS-485 ASCII @ 19200 BPS (Converted to RS-232C)  
Power Requirements 9.5 -36 Vdc @ 50 mA nominal

### ENVIRONMENTAL:

Temperature -40° to 60°C (-40° to 140°F)  
Humidity 0-100%  
Altitude -100 to +12,000 ft MSL

### PHYSICAL:

Weight 16.6 Kg (36.5 lbs.) Complete system with transit case  
Size 23.04H X 40.96W X 97.28L cm (9 X 16 X 38 in.)

### SHIPPING:

Weight 18.2 Kg (40.0 lbs)  
Volume 0.092 m<sup>3</sup> (3.2<sup>3</sup> ft.)

\* This accuracy is maintained when the sensor is within  $\pm 10$  degrees of vertical



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