

Data Manager 1000 SAT

An all-in-one unit for monitoring remote sensors almost anywhere there are unobstructed views of the sky. With an integrated barometric pressure sensor, this unit can be used with absolute pressure transducers and barometrically compensate readings. Featuring onboard data logging, detailed historical data can be saved and downloaded locally. Hourly readings are tightly packed into a single daily satellite message, reducing communication costs for the available system snapshot.



Features

- 2 Analog inputs
- 2 Digital inputs
- Download through USB port
- Integrated 5W solar panel, charger and batteries
 - 12V, 7Ah battery
 - 24V fused loop supply
 - 5V reference supply
- 2MB of data logging memory
 - Onboard temperature
- Onboard supply voltage measurement
 - Real-time clock/calendar
 - Battery-backed memory
- Onboard barometric air pressure sensor

Specifications

ANALOG INPUTS

- 2 Channel
- 12-bit resolution
- 4-20 mA or 0-5V

DIGITAL INPUTS

- Status-2 channels, dry contact compatible, self-powered
- Pulse-counting - DI pair can count >1200pps
- Pulse Duration Detection - convert pulses to analog with 4ms resolution
- DI pair used to decode shaft encoder

BAROMETRIC PRESSURE

- 40 kPa - 150 kPa
- Accuracy - +/- 1.0 kPa

REFERENCE OUTPUT

- 5 VDC, +/-3%
- 50 mA

INSTRUMENT POWER

- 24V regulated loop supply
- 120 mA
- Switchable to unregulated supply voltage
- Programmable on/off
- Fused and diode isolated

USB INTERFACE

- Log download
- Programming

SATELLITE TECHNOLOGY

- Global LEO satellite operation using the Globalstar Simplex Data Network

STANDARD MESSAGING

- Wake, GPS locate, transmit location, resume sleep
- 12 programmable sleep time-of-wake settings

DATA LOGGING

- log floating point, integer and status with time tag to onboard flash EEPROM
- 2MB log capacity
- Download log as comma delimited ASCII

POWER INTERFACE

- Integrated 5W solar panel
- 12V, 7Ah battery

I/O CONNECTIONS

- Screw-clamp connectors
- 28-14 AWG

ENVIRONMENTAL

- -40 to 85 degrees Celcius*
- 0-95% RH, non-condensing

WARRANTY

- 1-year standard limited warranty

** Satellite communication to remain operational though may experience RF signal degradation.*