



- > Supports a wide variety of serial communication-based sensors
- > 1 second sampling data logging
- > Support for over 250 protocols for ease of access
- Support of up to 10 simultaneous protocols from one TCP ethernet port
- Lithium-ion battery back-up power at 12 VDC 55Ah
- > Backup power equipment monitoring and data logging
- ➤ Utility power input support (120/240VAC)
- Universal SCADA platform support
 - > Scalability of I/O functions (RTD, DI, DO, AI, & AO)
 - Web server for remote access over LAN or WAN networks
 - > International languages and unicode characters
 - Port access programming functions available for configuring/reconfiguring attached devices

OPTIONAL FEATURES

- > Optional email notifications
- > Optional SMS functions
- Optional local machine interface (HMI)
- Optional solar panel for standalone battery charging off of the grid functions
- Optional FTP services



MEASUREMENTS

- GHI irradiance
- POA irradiance
- Back of module
 - temperature
- Air temperature
- Relative humidity

Barometric pressure

Wind speed











MEASUREMENT CAPABILITIES (OPTIONAL INSTRUMENTS)

ELECTRICAL		
AC	Nominal system voltage:	100-240VAC
	Input frequency:	50/60Hz
DC	Nominal system voltage:	12VDC/24VDC +/- 10%
LEAD ACID BATTERY SYSTEM	Nominal voltage:	12VDC
	Capacity:	55Ah
SOLAR PANEL	Nominal voltage:	24VDC
	Operating current:	3.3A at 1000W/m2

COMMUNICATION	IS	
USB PORT	Type B	
SERIAL PORTS	RS-232 via RJ12 - quantity 1	
	RS-422/485 via RJ45 terminal jack - quantity 2	
ETHERNET PORT	10 Base-T/100Base-TX via RJ45 NIC	
MEMORY		
ON-BOARD RAM	256Mb	
MEMORY CARD	16GB Industrial SD card	
	Supports 2 million write cycles	

REAL-TIME CLOCK

BATTERY Lithium coin cell - typical lifetime of 10 years at 25 C

ENVIRONMENTAL CONDITIONS

OPERATING TEMP RANGE	0° C to 45° C	
OPERATING HUMIDITY	80% max of relative humidity	
ALTITUDE	Up to 2000 meters	
NEMA RATING	4	

AMBIENT AIR TEMPERATURE

- Wind chill: C°/F°
- Dew point: C°/F°

ANEMOMETER

- Wind speed: m/s, mph
- Wind direction: 0-360° from North

BAROMETER

 Units supported: atm, Pa, hPa, millibars, mmHg, inHg, and psi

CALIBRATED REFERENCE CELL

• Reference cell irradiance: W/m2

PYRANOMETERS

- Global horizonal irradiance: W/m2
- Plane of array irradiance: W/m2
- Diffused irradiance: W/m2

RAIN GAUGE

- Precipitation type
- Intensity
- Totalized inches or millimeters

RELATIVE HUMIDITY

Percentage

SOLAR MODULE TEMPERATURE

- Back of module temperature: C°/F°
- Top of module temperature: C°/F°







