

## Sentalis™ Instrumentation

### RUGGED. ROBUST. RELIABLE.

Draker delivers robust performance monitoring instrumentation for commercial solar and other renewable energy technologies.

#### FEATURES:

- Monitor multiple sites at distributed locations
- Auto-calibration performed internally by datalogger before each measurement
- Integrated sensor mounts and interconnect cabling for quick and easy installation
- Rugged NEMA 4x enclosures
- CEC listed for PRMS
- On-site display\*
- Local data storage and battery backup
- Quality environmental sensors and revenue-grade power/energy meters
- Advanced datalogger from Campbell Scientific - known the world over for precision even in harsh, remote environments

#### OPTIONS:

- DC monitoring for system, sub-array, string\*
- Inverter communications for status and faults\*
- Configure energy meters for building load monitoring
- Weather Stations
- Expandable on-site memory
- Wireless and cellular links

\* available only with 1000 Base Station



### BASE STATION

Enclosure	1000	800
Operating Temperature Range:	-25° to +50°C	same
Storage Temperature Range:	-40° to +70°C	same
Rating:	NEMA 4X	same
Physical Size:	24.0" x 20.0" x 6.0"	18" x 16" x 10"
Material:	Stainless Steel	polycarbonate
Onsite Data Display	Yes	No
Available Options	up to 32 energy meters up to 19 sensor inputs Inverter Communications DC Monitoring	up to 2 energy meters up to 4 sensor inputs

### ENERGY METERS

Enclosure	
Operating Temperature Range:	-30° to +70°C
Storage Temperature Range:	-40° to +85°C
Rating:	NEMA 4X
Physical Size:	10" x 8" x 6"
Material:	polycarbonate

#### Standard Measurements

AC Power, Energy, Voltage, Current, plus many more.	Accuracy, revenue grade.	↓ ± 2%
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### PERFORMANCE SENSORS

#### Standard Measurements

Plane of Array (POA) Solar Irradiance (silicon pyranometer)	Typical Error	± 5%
	Stability	↓ ± 2% change over 1 year period
Back of Module (BOM) Temperature (silicon thermistor)	Accuracy	↓ 1°C

### ENVIRONMENTAL SENSORS

#### Standard Measurements

Ambient Temperature	Accuracy	↓ 1°C
Horizontal Solar Irradiance (silicon pyranometer)	Typical Error	± 5%
	Stability	↓ ± 2% change over 1 year period
Wind Direction (mechanical vane)	Range	360°
	Linearity	↓ 1%
	Dead Band	8° maximum, 4° typical
Wind Speed (cup anemometer)	Starting Threshold	1.75mph
	Accuracy	↓ 0.1 m/s (5 m/s to 25 m/s)
Wind Speed (sonic)	Range	0 to 60 m/s
	Accuracy (0 to 35 m/s)	Greater of ± 0.3 m/s or ± 3%
	Accuracy (35 to 60 m/s)	±3%
Wind Direction (sonic)	Azimuth	0 to 360°
	Accuracy	± 3°
Precipitation	Accuracy	± 5%
Barometric Pressure	Range	600 to 1100 hPa
	Accuracy	± 1 hPa
Relative Humidity	Accuracy (0 to 90%RH)	± 3%RH
	Accuracy (90 to 100%RH)	± 5%RH