



Solar Energy




Systems for Solar Resource Assessment, Power Performance, and Advanced Monitoring



Campbell Scientific offers automated data-acquisition systems specifically designed for solar monitoring applications. Preconfigured systems, designed to meet CAISO standards for solar telemetry, are available for photovoltaic and concentrated solar technology

projects of all sizes. Our engineers work closely with the customer to design highly customized stations, advanced research and development stations, and custom application programming interfaces (API) for data collection.




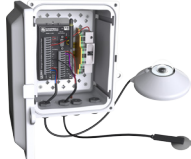

MAJOR SYSTEMS

	Measurements		Datalogger	Power	Communications
	Typical	Optional			
SOLAR800 Complete MET Solution for Solar Resource Assessment 	Global Horizontal Irradiance (GHI), Plane-of-Array Irradiance (POA), air temperature, wind speed, wind direction, precipitation, solar position	relative humidity, barometric pressure	CR800	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP
SOLAR1000 Operational Met Station for Solar Energy Producing Utilities 	Global Horizontal Irradiance (GHI), Plane-of-Array Irradiance (POA), back-of-solar panel temperature, wind speed, wind direction, air temperature, relative humidity, barometric pressure, precipitation, solar position	DC current and voltage (string and/or module), visibility, electric field, cloud height, short circuit current, module soiling, surface moisture	CR1000, CR800, CR3000	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP, TCP/IP, fiber optic, radio, serial, field display, satellite, Wi-Fi
SOLAR1000-SCE Operational Met Station for Solar Energy Producing Utilities; meets CAISO, SCE compatible 	Global Horizontal Irradiance (GHI), Plane-of-Array Irradiance (POA), diffuse radiation, back-of-solar panel temperature, wind speed, wind direction, air temperature, relative humidity, barometric pressure, precipitation, solar position	DC current and voltage (string and/or module), visibility, electric field, cloud height, short circuit current, module soiling, surface moisture	CR1000, CR3000	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP, TCP/IP, fiber optic, radio, serial, field display, satellite, Wi-Fi

More info: 435.227.9030

campbellsci.com/solar-energy



	Measurements		Datalogger	Power	Communications
	Typical	Optional			
CSP100 Highest accuracy solar monitoring solution with 2-axis sun tracker 	Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance (DIFF), Global Horizontal Irradiance (GHI), wind speed, wind direction, air temperature, relative humidity, barometric pressure, precipitation, solar position	visibility, cloud height, spectral irradiance	CR1000, CR3000	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP, TCP/IP, fiber optic, radio, serial, field display, satellite, Wi-Fi
RSR100 Rotating Shadow-band Radiometer 	Global Horizontal Irradiance (GHI), Diffuse Horizontal Irradiance (DIFF), Plane-of-Array Irradiance (POA), Direct Normal Irradiance (DNI), back-of-module temperature (BOM), solar position/air mass, wind speed, wind direction, air temperature, relative humidity, barometric pressure, precipitation	string current and voltage	CR1000 CR800	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP, TCP/IP, fiber optic, radio, serial, field display, satellite, Wi-Fi
SMP100 Solar module performance solutions, including Soiling 	module current, module voltage, back-of-panel temperature, short-circuit current, wind speed, irradiance, solar position	string current and voltage, spectral irradiance	CR1000 CR800	AC, DC, or solar	Modbus, cellular, email, DNP3, FTP, TCP/IP, fiber optic, radio, serial, field display, satellite, Wi-Fi
SOLAR200 Small to Medium Commercial Solar Monitoring Solution 	Global Horizontal Irradiance (GHI), Plane-of-Array Irradiance (POA), back-of-solar panel temperature, wind speed, wind direction	relative humidity, barometric pressure	CR200X	AC, DC, or solar	Modbus, multidrop, cellular, TCP/IP, fiber optic, radio, satellite, Wi-Fi
UTILITY-MET100 Utility-Grade Weather Station for SCADA Operations 	air temperature, relative humidity, wind speed, wind direction, precipitation, barometric pressure, solar radiation	back-of-solar panel temperature	CR1000	AC, DC, or solar	Modbus, multidrop, cellular, TCP/IP, fiber optic, radio, satellite, Wi-Fi