![also energy — a stem company]

PowerLight Commercial Solution 400

AlsoEnergy's vertically-integrated, edge-to-cloud platform includes a cost-effective standardized hardware monitoring solution for light commercial PV systems. The PLCS 400 is designed for 3-phase systems with up to 16 external inverters. Performance data is uploaded to the PowerTrack or LocusNOC applications, which provide a suite of tools and analytics for asset managers. A successor for the Locus LGate 320, the PLCS 400 provides direct monitoring of inverters across all supported inverter technologies.

- DataLogger with LCD touchscreen display
- Energy meter with 3 solid core CTs (revenue grade accuracy)
- Weather station with irradiance sensor, mounting bracket, and module temperature sensor
- 5 port Ethernet switch
- NEMA4 weatherproof enclosure
- 4G cell modem (requires a cellular plan)

Solution features

- Up to 16 external inverters
- Modbus via RS-485 or TCP connections to inverters
- 4G Cellular Connectivity
- Remote firmware updates
- 5-minute data granularity

- Uploads at 2 hour intervals
- Satisfies most US agency reporting requirements
- 400 Max Amps limit
- All parts covered with standard AlsoEnergy 5-year warranty (excluding irradiance sensor and cell modem)

Product qualifications

- PLCS 400 logs data during daylight hours only; for demand metering applications the PL1000 is recommended
- PLCS 400 has a fixed range of supported inverter models for clients using LocusNOC software. The full list of supported inverters is https://kb.alsoenergy.com/article. php?id=1418

Specifications

PLCS-400-CM

Assembly		
	Enclosure dimensions	15.7" x 15.7" x 7.9" (400mm x 400mm x 200mm)
	Enclosure rating	NEMA4
	Operating temperature	-13° to 158°F (-25° to 70°C), <95% relative humidity non-condensing
	Power supply	120-277VAC
	Ports	Three available 10/100 Ethernet ports

Datalogger		
	Devices supported	Up to 16 inverters – only inverters supported as external devices
	Storage	Removable 2GB industrial rated micro SD card
	Serial	RS-485 with integrated 120 ohm termination resistor
	Primary protocols	Modbus TCP, Modbus RTU, most proprietary inverter protocols
	Touch screen	Color, resistive touch screen 2" by 2.75"
	Warranty	Standard 5 year warranty

Meter		
	Voltage inputs	90-600VAC
	Accuracy	Class 0.5S
	CTs	3 solid core CTs with 1.25 inch opening; rated input up to 400 Amp
	CT accuracy	±0.5% revenue grade accuracy
	Regulatory	UL listed 508A
	Warranty	Standard 5 year warranty

Cell modem		
	Cellular data	LTE Cat M1
	Warranty	1 year

Specifications

PLCS-400-CM

Irradiance sensor		
	Pyranometer type	Silicon cell with mounting bracket
	Absolute accuracy	±5%
	Dimensions	1.12" H x 0.93" D (28.32mm x 23.5mm)
	Wiring	Includes 5 meters of twisted-pair, shielded wire with Santoprene jacket
	Operating temperature	-13° to 131°F (-25° to 55°C)
	Warranty	1 year against defects in materials and workmanship

Panel temperature sensor		
	Form	Thermal tab disk with 10 ft lead to an outdoor enclosure with a 4-20mA transmitter
	Sensor type	Platinum RTD 1K
	Mounting	Self-adhesive ring for attaching to a solar module
	Operating temperature	-40 to 185°F (-40 to 85°C)
	Transmitter range	Transmitter can be extended 1000 ft from enclosure with 18AWG cable
	Warranty	Standard 5 year warranty