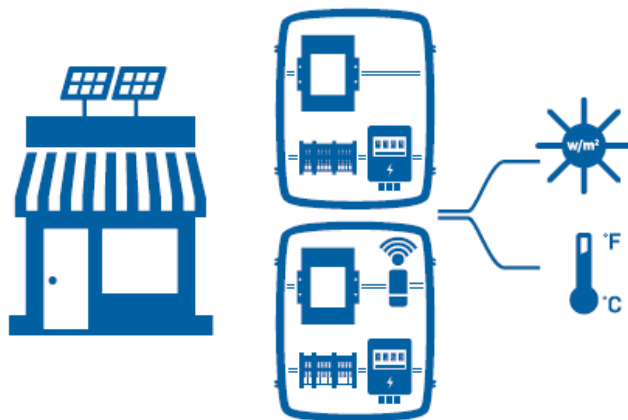


Power Light Commercial Solution 400 (PowerLCS 400)

AlsoEnergy now offers a cost-effective standardized solution for light commercial PV systems. This solution is designed for 3-phase systems with up to 16 external inverters. Performance data is uploaded to the PowerTrack or LocusNOC monitoring applications which provide a suite of tools and analytics for asset managers. The PowerLCS 400 is able to provide inverter direct monitoring across all supported inverter technologies. This is a successor product for the Locus LGate 320, providing access to AlsoEnergy software applications for your light commercial systems.



Solution Features

- Up to 16 external inverters
- Modbus via RS-485 or TCP connections to inverters
- Cellular
- Remote firmware updates
- 5 minute data granularity
- Uploads at 2 hour intervals
- Satisfies most US agency reporting requirements
- For systems up to 325kW utilizing 480V inverters (140kW @ 208V)
- All parts except irradiance sensor and cell modem covered with standard AlsoEnergy 5-year warranty

Standardized PowerLCS 400 system includes:

- Data Logger 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 the addition of a cellular plan to utilize the cell modem)

Product Qualifications

- Note that PowerLCS 400 logs data during daylight hours only; for demand metering applications we recommend the PL1000
- Note that the PowerLCS 400 has a fixed range of supported inverter models for clients using LocusNOC software. The full list of supported inverters may be found here: <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

Irradiance Sensor

Pyranometer type	Silicon cell with mounting bracket
Absolute accuracy	±5%
Dimensions	Height x diameter: 1.12" x 0.93" (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

