

# PowerLogger Commercial Solution 600

AlsoEnergy's vertically-integrated, edge-to-cloud platform includes a convenient standardized hardware monitoring solution for small to mid-sized commercial PV systems. The PLCS 600 combines our standard commercial datalogger with a revenue grade meter, a weatherproof NEMA 4 enclosure, and other supporting hardware. The PLCS 600 is recommended for 3-phase systems with up to 20 external inverters. Performance data is uploaded to PowerTrack, AlsoEnergy's flagship cloud-based application for monitoring, managing, and optimizing energy and financial performance of clean energy assets.



## Standardized PLCS 600 includes:

- DataLogger with LCD touchscreen display
- Revenue grade energy meter compatible with all 5A CTs (sold separately)
- Three weather station choices may add data for irradiance, back-of-module panel temperature, ambient temperature, and wind speed
- 5-port Ethernet switch
- NEMA4 weatherproof enclosure
- 4G cell modem (requires a cellular plan)

## Solution features

- Up to 20 external inverters
- Modbus via RS-485 or TCP connections to inverters
- 4G cellular connectivity
- Remote firmware updates
- Up to 1-minute data granularity
- Uploads at 5-minute intervals
- Suitable for demand meter, relay, other non-PV use cases
- For systems with a single metering point; direct metering or PT secondary voltage up to 600VAC
- Satisfies reporting requirements for most US electricity sector agencies
- All parts except weather sensors and cell modem covered with standard AlsoEnergy 5-year warranty
- Supported on PowerTrack only engineering & project management teams

# PLCS 600 Options

PLCS-600-CM-BASE	+ cell modem, + reference cell, BOM panel temperature
PLCS-600-CM-PLUS	Contains the above + ambient temperature sensor, wind speed sensor
PLCS-600-CM-PRO	Contains the above + Class C pyranometer

## Specifications

<b>Assembly</b>	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
	Communication ports	Three available 10/100 Ethernet ports, two half-duplex rs485 ports
	Regulatory	UL listed 508A
<b>Datalogger</b>	Devices supported	Up to 40 connected Modbus RTU enabled devices (20 per rs485 port) / Recommended limit 32
	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
<b>Meter</b>	Voltage inputs	90-600VAC
	Accuracy	Meter 0.2% (see CT datasheet for CT accuracy information)
	CTs	Any CT with 5A secondary current ratio (sold separately)
	CT accuracy	Refer to CT datasheet
	Warranty	Standard 5-year warranty



**Irradiance sensor**

(Included with Base, Plus, and Pro weather station options)

Irradiance sensor type	Monocrystalline Silicon reference cell with mounting bracket and 3m twisted pair shielded cable
Absolute accuracy	±5W/m <sup>2</sup> ± 2.5% of reading
Dimensions	3.34" W x 6.10" H x 1.54" D   (85mm x 155mm x 39mm)
Warranty	1 year against defects in materials and workmanship

**Back of module panel temperature sensor**

(Included with Base, Plus, and Pro weather station options)

Form	3m cable with 3-pin connector compatible with paired reference cell - sensor cable cannot be extended
Sensor type	PT1000 Class A
Mounting	Self-adhesive for attaching to a solar module
Warranty	1 year against defects in materials and workmanship

**Wind speed sensor**

(Included with Plus and Pro weather station options)

Form	Cup star anemometer with 5m 2-pin connector compatible with paired reference cell
Sensor type	Reed relay
Mounting	Mounting bracket for pole or surface mounting included
Accuracy	0.5 m/s or 5% of reading
Sensor range	0.9 – 40m/s (2 – 90 mph)
Warranty	1 year against defects in materials and workmanship

**Ambient temperature sensor**

(Included with Plus and Pro weather station options)

Voltage inputs	90-600VAC
Accuracy	Meter 0.2% (see CT datasheet for CT accuracy information)
CTs	Any CT with 5A secondary current ratio (sold separately)
Warranty	Standard 5-year warranty

**Class C pyranometer**

(Included with Pro weather station option)

Form	ISO 9060 Spectrally Flat Class C (Second Class) Pyranometer
Communication	RS-485 / Modbus
Mount/Set up	Ball-level tube mount/10 Meter, M12-A Cable
Warranty	Manufacturer's 5-year warranty

**Cell modem**

Cellular data	4G LTE
Warranty	1 year

