

# 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	+ cell modem, + reference cell, BOM panel temperature, ambient temperature, wind speed
PLCS-600-CM-PRO	+Class C pyranometer

### **Specifications**

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
	Communication ports	Three available 10/100 Ethernet ports, two half-duplex rs485 ports
	Regulatory	UL listed 508A
Datalogger	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
Meter	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	$\pm$ 5W/m2 $\pm$ 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	Form	Cup star anemometer with 5m 2-pin connector compatible with paired reference cell
(Included with Plus and Pro weather	Sensor type	Reed relay
station options)	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







