

The CPS AC-PLC KIT 800V/US is designed for the implementation of power line communication (PLC) over the AC conductors on the low-voltage side of a PV system enabling a low-cost and reliable solution for data communication and control of the 250/275KTL inverters.

At the signal source side, the PLC modulation device inside the CPS AC-PLC KIT transforms the data to be transmitted into high-frequency signals through a series of operations such as encoding and modulation, and couples the high-frequency signals to the AC conductors through coupling circuits. At the receiver end within each 250/275KTL inverter, the PLC demodulation device separates and restores the modulated data carrier signals to their original form.

The CPS AC-PLC KIT includes the FlexOM Gateway, 12 Vdc power supply, surge and over-current protection, and a 120 Vac convenience outlet all mounted and pre-wired in a weatherproof NEMA 4X enclosure.

Key Features

- Low-cost PLC communication solution
- Preconfigured for plug-and-play
- Integrated FlexOM Gateway
- Compatible with CPS FlexOM Monitoring platform
- All hardware mounted and pre-wired
- NEMA 4X outdoor rated enclosure
- Provisions for padlock / LOTO
- Surge protection included
- 120 Vac conveniece outlet
- Supports up to 32 devices
- Certified to UL 1741
- Supports distances up to 1000ft











Internal View of AC-PLC KIT 800V/US Enclosure



Model Name	AC-PLC KIT-800V/US
Configuration	
DAS equipment	CPS FlexOM Gateway, Ethernet (standard)
AC-PLC communication device	Standard
Input Parameters	
Number of input circuits	1
OCPD type	Fuse, 1000 V, 16 A
Compatible inverter(s)	CPS SCH250/275KTL-DO/US-800
Input voltage	800 Vac, 50/60 Hz
Input conductor size	#6 – #14 AWG CU
Output Parameters	
Convenience outlet	120 Vac, 50/60 Hz, 15 A
DC power supply	12 Vdc, 2 A
FlexOM Gateway	
RS485 port / inverter daisy-chain	Isolated RS485, max.32 Devices
Auxiliary port / third-party data logger	AUX Port, Isolated 3 Pin RS485, A+/B-/G
FlexOM service / third-party server	Internet, Primary MQTT / Internet, HTTPS or Secondary MQTT
Ethernet port / SCADA client	RJ45, 10Base-T / 100Base-T, Ethernet Port, Modbus/TCP
Mechanical	
Dimensions (W x H x D)	13.8 x 13.8 x 5.9 in (350 x 350 x 150 mm)
Weight	39.7 lbs (18 kg)
Padlockable enclosure (LOTO)	Yes
Installation method	Wall- or rack-mounted
Conduit knockouts	Pre-punched, 1" trade size (5 each)
Environment	
Enclosure protection degree	NEMA Type 4X
Operating temperature range	-22°F to +140°F / - 30°C to +60°C
Operating humidity	0 to 95%, non-condensing
Operating altitude	13123 ft / 4000 m (no derating)
Safety	
Certifications and standards	UL 1741, CSA-22.2 NO.107.1, FCC Part 15B
Warranty	
Standard	2 years

