

# CPS AC-PLC KIT-800V/US for CPS 250/275KTL Inverters



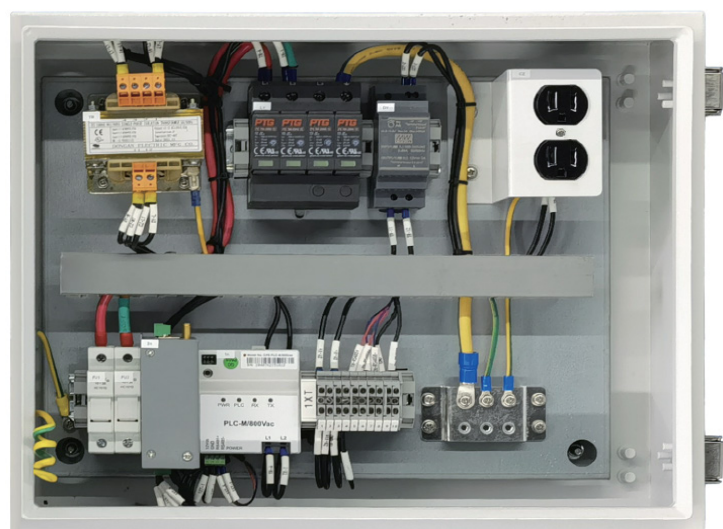
The CPS AC-PLC KIT 800V/US is designed for the implementation of power line communication (PLC) over the AC conductors on the low-voltage side of a PV system enabling a low-cost and reliable solution for data communication and control of the 250/275KTL inverters.

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 convenience outlet
- Supports up to 32 devices
- Certified to UL 1741
- Supports distances up to 1000ft



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

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| Model Name                               | AC-PLC KIT-800V/US   |
| <b>Configuration</b>                     |  |
| DAS equipment                            | CPS FlexOM Gateway, Ethernet (standard)                    |
| AC-PLC communication device              | Standard   |
| <b>Input Parameters</b>                  |  |
| 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  |
| <b>Output Parameters</b>                 |  |
| Convenience outlet                       | 120 Vac, 50/60 Hz, 15 A                                    |
| DC power supply                          | 12 Vdc, 2 A  |
| <b>FlexOM Gateway</b>                    |  |
| 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      |
| <b>Mechanical</b>                        |  |
| 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)                        |
| <b>Environment</b>                       |  |
| 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)                            |
| <b>Safety</b>                            |  |
| Certifications and standards             | UL 1741, CSA-22.2 NO.107.1, FCC Part 15B                   |
| <b>Warranty</b>                          |  |
| Standard                                 | 2 years  |

