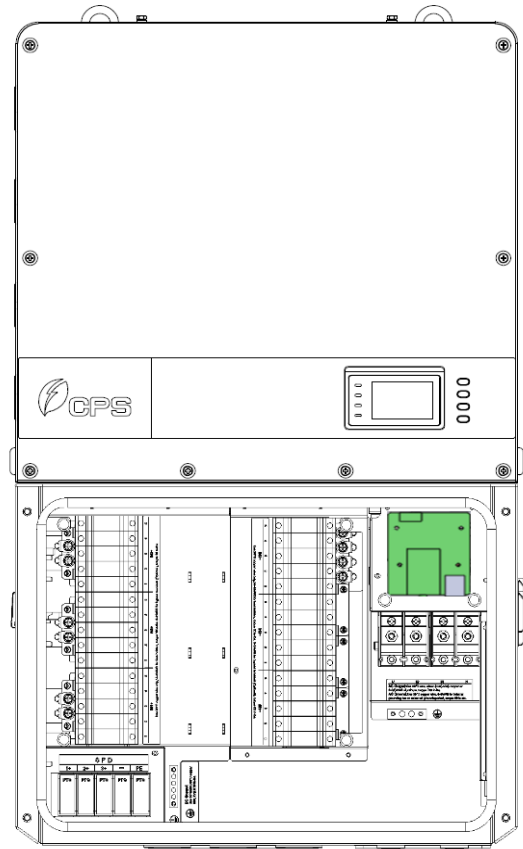
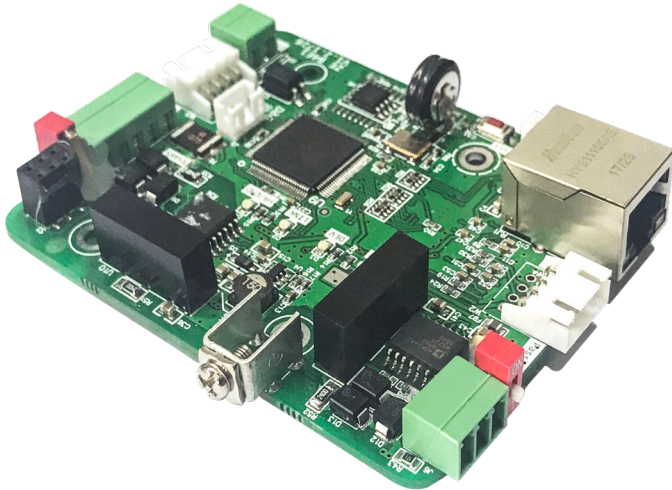


# CPS Flex Gateway

Model CPS FG4E-US-KIT



The CPS Flex Gateway is a new communications and controls solution for the CPS 36, 50, 60, 100 and 125kW inverters. The gateway is a Modbus master data logger and communications device. This flexible solution enables three parallel outbound communication options: (1) local pass-through Modbus RS485 data to 3rd party solutions, (2) Ethernet based communications for CPS service operations, and (3) a programmable Ethernet based connection to a location chosen by the customer.

The Flex Gateway enables remote firmware upload by the CPS Service team, enabling efficient field service solutions for our customers. The remote upload function is facilitated by the CPS Service team.

## Key Features

- Installed in a single inverter wire-box: no power or extra equipment required
- Modbus communications input (up to 70 inverters per card) - Modbus RS485
- Complete controls functionality via Modbus (per inverter or broadcast command)
- Flexible outbound communications
- Programmable IP address for customer direct data (SunSpec XML HTTPS format)
- Remote firmware update solution reduces the need for a truck roll
- Pass-through data for local 3rd party solutions (Modbus RS485)
- Includes WiFi module for use with "CPS Connect" IOS or Android Smart Phone App
- Accessory enclosure allows for DIN rail mounting in 3rd party communication enclosures

|   |  |
|---|--|
| Model Name                                    | CPS FG4E-US-KIT  |
| <b>Communications</b>                         |  |
| Inverter to Gateway                           | RS485  |
| Gateway to Customer                           | Standard: Pass-through RS485, Ethernet   |
| Inverter connections per card                 | 70   |
| Protocol                                      | SunSpec XML HTTPS, DHCP, DNS Resolution, CPS Modbus RTU  |
| <b>Monitoring</b>                             |  |
| IP Addresses                                  | CPS Service + Customer Programmable location   |
| Remote monitoring                             | 3rd party platform   |
| <b>Setup and Programming</b>                  |  |
| Local Programming                             | LinKit WiFi to CPS Connect Phone App (IOS and Android)   |
| Remote Programming                            | CPS Service  |
| <b>Data logging Specifications</b>            |  |
| Data sampling rate                            | Programmable data sampling (1 to 15 minute sample rate)  |
| Local data storage                            | 30 days based on 15 minute intervals   |
| Upgradeability                                | Remotely via CPS Service platform or 3rd party platform / locally via USB  |
| Data parameters                               | Modbus ID, Inverter S/N's, Model, TYield/DYield(kWh), RunT(min), Mode, Upv(V), lpv(A), Pac(kW), PF, Freq(Hz), Uabc(V), Iabc(A) |
| <b>Advanced Functions</b>                     |  |
| Remote O&M operations                         | Inverter parameter settings / inverter firmware upgrade  |
| Controls Capability                           | Capable of control commands via Modbus<br>(ie; PF control, Active Power curtailment, Remote reset)                             |
| <b>Connections</b>                            |  |
| RS485 Port A                                  | RS485 + DC input, 6 Pin Connector  |
| RS485 Port B                                  | RS485 + DC input, 5 Pin, 3.5mm, Edge Connector   |
| Pass-through                                  | RS485, 3 Pin Connector   |
| Ethernet                                      | RJ45, 10BaseT / 100BaseT Connector   |
| LinKit WiFi Module                            | 4 Pin Connector  |
| <b>Power Supply</b>                           |  |
| DC Input Voltage                              | 9-24Vdc, 28Vdc Max (provided when installed in Inverter wirebox)   |
| Power Consumption                             | <6W  |
| <b>Environmental Parameters</b>               |  |
| Ambient temperature range                     | -30 to +85°C, Natural Convection cooling   |
| Environmental protection                      | Installed in NEMA 4X Inverter wirebox<br>(CPS 36kW Inverters require enclosure installed - included in kit)                    |
| Relative humidity                             | <85% Non-condensing  |
| <b>Mechanical Parameters (per unit)</b>       |  |
| Flex Gateway card Dimensions (H x W x D)      | 3.38" x 2.71" x 0.63" (86mm x 69mm x 16mm)   |
| Flex Gateway enclosure Dimensions (H x W x D) | 3.50" x 1.38" x 3.13" (89mm x 35mm x 79.4mm)   |
| Flex Gateway card and enclosure Weight        | 0.3lb (150g)   |

