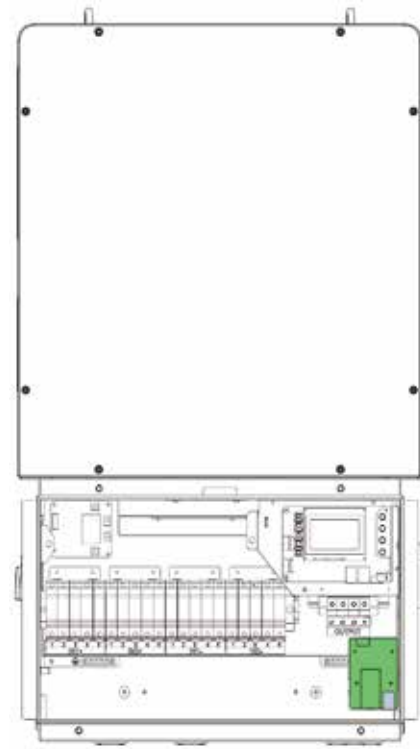# CPS Flex Gateway

The CPS Flex Gateway is a new monitoring and controls solution for the CPS 25 to 350kW inverter line.

The gateway acts as a Modbus master data logger and gateway solution for monitoring and controlling commercial and utility scale inverter applications. This flexible monitoring solution enables three parallel outbound communication potions: (1) local pass-through Modbus data to 3rd party solutions, (2) Ethernet based communications to the CPS portal and (3) a programmable Ethernet based connection to a location chosen by the customer.

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

Key Features

■ Installed in a single inverter wire-box: no power or extra equipment required

■ Modbus communications input (up to 32 inverters per card) - Modbus TCP/IP or Modbus RTU

■ Complete controls functionality via Modbus (per inverter or broadcast command)

■ Flexible outbound communications

■ Programmable IP address for customer direct data (json format)

■ Remote F/W solution

■ Pass-through data for local 3rd party solutions (Modbus RS485)

■ Low cost

Model Name	Flex Gateway
Communications	
Inverter interface	RS485
User interface	Standard: RS485, Ethernet, USB
Inverter connections per card	32
Protocol	HTTPS, DHCP, DNS Resolution, Modbus TCP, Modbus RTU
Monitoring	
Web connections	IP addresses: CPS + Programmable location
Local monitoring	Wired connection to the Data logger (integrated web GUI)
Remote monitoring	CPS platform or 3rd party platform
Data logging Specifications	
Data sampling rate	Programmable data sampling (1 to 15 minute sample rate)
Local data storage	Log data for 30 days based on 15 minute intervals
Upgradeability	Remotely via CPS 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), Ipv(A), Pac(kW), PF, Freq(Hz), Uabc(V), Iabc(A)
Advanced Functions	
Remote O&M operations	Inverter parameter settings / inverter firmware upgrade
Controls Capability	Capable of control commands via Modbus (ie; PF control, Active power curtailment, Remote reset)
Power Parameters	
Input Voltage	9 ~ 24 Vdc
Power Consumption	2.5 W, Max. 5 W
Environmental Parameters	
Ambient temperature range	-30 to +85°C
Environmental protection	Installed in NEMA 4X wire-box
Relative humidity	<85% Non-condensing
Mechanical Parameters (per unit)	
Dimensions (H x W x D)	86mm * 69mm * 16mm
Weight	50g