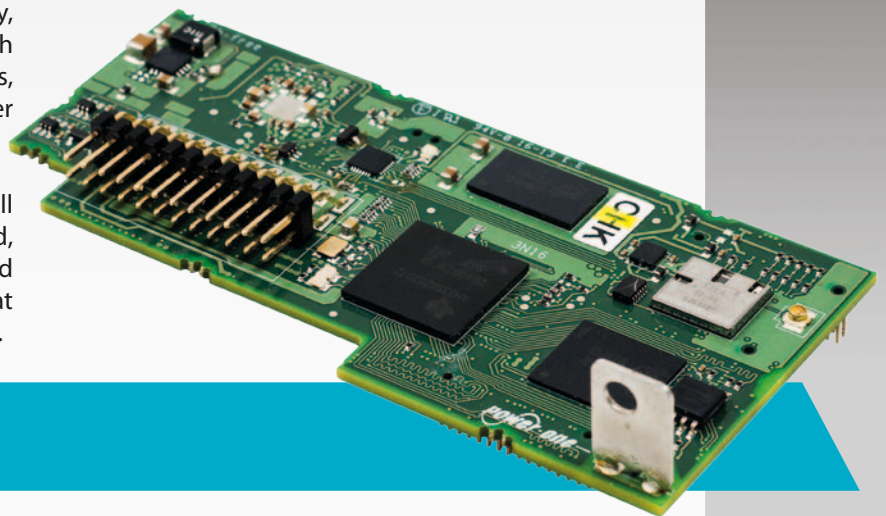# WIFI LOGGER CARD

## GENERAL SPECIFICATIONS

The WIFI LOGGER CARD is a new expansion board for Power-One's string inverters which provides residential and commercial users an advanced and cost-effective solution for monitoring and controlling their photovoltaic system.

A member of Power-One's communication card family, the WIFI LOGGER CARD features easy installation coupled with the lowest cost monitoring solutions to new and existing string inverters by utilizing the expansion slot.

Thanks to direct IP connectivity and the Wi-Fi configuration techniques, this card can be easily configured for most Wi-Fi networks, without installing any additional data logger or gateway.
The internal web server allows the card to also act as a local monitoring solution by using Power-One's new mobile APP from a smart phone, essentially providing the user with a complete remote and local monitoring experience.

Standard functionalties assures Interoperability, security, easy installation, and reliability. With innovative commissioning and upgrade features, the WIFI LOGGER CARD provides the best user experience for Power-One's customers.

Not only is the WIFI LOGGER CARD suitable for all of Power-One's string inverters currently deployed, but it takes advantage of the Hyperlink bus found in new inverters for obtaining real time data that can be used for grid control power management.

# Features

- Easily installed on new as well as exiting Power-One's string inverters
- Local and/or remote monitoring in one solution
- High performance data logging
- Hi-Speed inverter data exchanging through Hyperlink [where available]
- Reading and writing of inverter parameters for advanced remote operations (inverter's FW upgrade; customer SCADA commands);
- Modbus TCP Sunspec compliant
- HTTPS support for encryption of user data
- Linux based architecture

## APPLICATION WITH WIFI LOGGER CARD

AURORA MOBILE APP

AURORA VISION® / AURORA EASY VIEW™
web platform

WIFI LOGGER CARD

WI-FI router

INTERNET

# Block Diagram

| PARAMETER | WI-FI CARD |
|---|---|
| **Communication** | |
| Inverter Interface | Hyperlink (CAN@1 Mbps + RS485@115 kBaud) / Legacy (RS232 TTL @ 19.2 KBaud) |
| User Interface | Wi-Fi IEEE 802.11 b/g/n |
| **Communication Protocols** | |
| LAN/WAN Protocols | HTTPS, DHCP, NTP, SSL, SSH, XML, Modbus TCP (Sunspec) |
| **Data Logging** | |
| Web User Interface | Integrated |
| Local Monitoring | via Power-One mobile App |
| Remote Monitoring | via Aurora Vision® / Aurora Easy View™ web platform |
| **Data Logging Specifications** | |
| Data Sampling Rate | High frequency data sampling (less than 1 minute average) |
| Local Storage | Log data for 30 days based on 15-minute intervals |
| Upgradeability | Field upgradable over the Internet or locally |
| **Advanced functionalities** | |
| Inverter's parameters | remote reading & writing operations allowed |
| Inverter's firmware | remote upgrade allowed |
| Inverter's power management | Grid control power-management enabled |
| **Power Supply** | |
| DC Power Consumption | ~ 2W |
| **Environmental Parameters** | |
| Ambient Temperature Range | [-20; +85] °C |
| Environmental Protection | IP 20 |
| Relative Humidity | <85% Non-condensing |
| **Mechanical Parameters (per unit)** | |
| Dimensions (H x W x D) | 3.81' x 1.81' x 0.63' (97 mm x 46mm x 16mm) |
| Weight | 0.06 lbs (26g) |
| Mounting System | inverter's expansion slot |
| **Compliance** | |
| Marking | CE |
| Emissions | FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and Radiated Emission; |
| Immunity | EN55024 |

**Remark. Features not specifically listed in the present data sheet are not included in the product**

| INVERTER MATRIX COMPATIBILITY | | |
|---|---|---|
| **INVERTER FAMILY** | **LEGACY INTERFACE** | **HYPERLINK INTERFACE** |
| UNO-2.0 | YES | |
| UNO-2.5 | YES | |
| PVI-3.0 | YES | - |
| PVI-3.6 | YES | - |
| PVI-3.8 | YES | - |
| PVI-4.2 | YES | - |
| PVI-4.6 | YES | - |
| PVI-5000 | YES | - |
| PVI-5000 | YES | - |
| PVI-6.0 | YES | - |
| PVI-8.0 | YES | - |
| PVI-10.0 | YES | - |
| PVI-12.5 | YES | - |
| TRIO-5.8 | - | YES |
| TRIO-7.5 | - | YES |
| TRIO-8.5 | - | YES |
| TRIO-20.0 | YES | - |
| TRIO-27.6 | YES | - |

# www.power-one.com

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