ETHERNET NETWORK CARD

RELIABLE AND CONVENIENT REMOTE COMMUNICATIONS AND TROUBLESHOOTING





FEATURES

- Installed in wiring box: no additional equipment needed*
- Modbus communications input (up to 32 inverters per card)
- Modbus RTU Complete controls functionality via Modbus (per inverter or broadcast command)
- Flexible outbound communications
- Programmable IP address for customer direct data
- Remote firmware solutions for third party solutions
- WiFi for local smart device access to YConnect Pro embedded. No extra WiFi dongle required.
- DIN rail enclosure provided for use in third-party communications enclosures
- Cellular communications options for up to 10 inverters or up to 32 inverters
- · Web Portal Access option

The Yaskawa Solectria Solar Ethernet Network Card is a new and powerful monitoring and controls solution for the PVI 25TL-208, PVI 25TL-480, PVI 36TL-480*, PVI 50TL-480, and PVI 60TL-480 inverters.

This network card acts as a Modbus master data logger and communications device with the added optional benefit of Web Portal Access and Cellular Accessibility. On top of these new capabilities, the ENC-G5 offers, seamless compatibility through Ethernet-based communications to the SolrenView monitoring portal along with local pass-through Modbus data to third-party solutions.

The ENC-G5 Options and Packages include the ENC-PORT, ENC-PORT-C510, ENC-PORT-C532, which allow Web Portal Access through the YConnect Pro Portal giving users access to features such as remote resets, kiosk views, and remote firmware upgrades. Cellular accessibility options can cover the data requirements of up to 10 or 32 inverters depending on the package chosen, and require AT&T or T-Mobile cellular coverage on site.

* The PVI 36TL-480 inverter requires the use of a third-party external weatherproof box and the included DIN-rail enclosure. The ENC-G5 can be mounted directly inside the wirebox of the new PVI 36TL-480-V2.



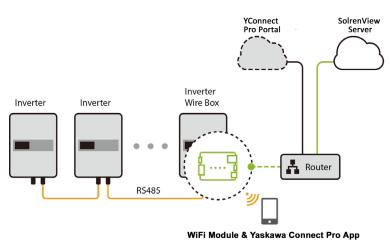
ETHERNET NETWORK CARD TECHNICAL DATA

SPECIFICATIONS

| Ethernet Network Card | | ENC-G5 | ENC-PORT-C510 | ENC-PORT-C532 | ENC-PORT |
|--------------------------------|---|--|-------------------------|-------------------------|-------------------------|
| Hardware | Includes Fifth Generation Ethernet Network Card (ENG-G5) with local WiFi capabilities embedded, Plastic DIN Rail Enclosure | Ø | Ø | Ø | - |
| | 4G SIM Card | - | ☑ Up to 10 inverters | ☑ Up to 32 inverters | - |
| Remote Capabilities | 5 Years of Web Portal Access (Y Connect Pro) | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | $\overline{\checkmark}$ |
| | Firmware Upgrade (Remote) | Via Solectria Service | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| | On/Off Reset (Remote) | Via Modbus | $\overline{\checkmark}$ | $\overline{\square}$ | $\overline{\checkmark}$ |
| | Arc-Fault Clearing (Remote) | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| | Active Power Setting (Remote) | Via Modbus | $\overline{\checkmark}$ | $\overline{\square}$ | $\overline{\checkmark}$ |
| | PF Setting (Remote) | Via Modbus | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| | Fault Code Observation | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | $\overline{\checkmark}$ |
| | Public Kiosk View | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| | Asset Portfolio Feature | - | $\overline{\checkmark}$ | $\overline{\square}$ | $\overline{\checkmark}$ |
| | Monitoring Alerts | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| | 2 years of Rolling Data Storage | - | $\overline{\checkmark}$ | $\overline{\square}$ | $\overline{\checkmark}$ |
| | End User Account Administration | - | $\overline{\checkmark}$ | $\overline{\checkmark}$ | \checkmark |
| Communications | Inverter to ENC-G5 | RS485 | | | |
| | Native Internet Access | Ethernet | 4G Cellular | 4G Cellular | N/A |
| | Inverter Connections per Item | 32 | 10 | 32 | 32 |
| | Protocol | SunSpec XML, HTTPS, DHCP, DNS Resolution, Solectria Proprietary RTU | | | ry RTU |
| Data Logging Specifications | Data sampling rate | Programmable data sampling (1 to 15 minute sample rate) | | | |
| | Local Data Storage | 30 days based on 15 minute intervals | | | |
| | Data parameters | Modbus ID, Inverter S/N's, Model, TYield/DYield(kWh), RunT(min), N Upv(V), Ipv(A), Pac(kW), PF, Freq(HZ), Uabc(V), Iabc(A) | | | Mode, |
| Power Supply | DC Input Voltage | 9-24 Vdc, 28 Vdc max (provided when installed in inverter wire box) | | | N/A |
| | Power Consumption | <1 W typical; Max 5 W | | | N/A |
| Performance | Ambient Temperature Range | -22°F to 185°F (-30°C to +85°C) | | | N/A |
| | Environmental Protection | Installed in NEMA 4X inverter wire box (PVI 36TL-480 inverters: use included DIN rail enclosure & install in third-party weatherproof box) | | | N/A |
| | Relative Humidity | < 85% Non-condensing | | | N/A |
| Mechanical Parameters | Ethernet Network Card (H x W x D) | 2.76 in x 3.94 in x 1.10 in (70 mm x 100 mm x 28 mm) | | | |
| | ENC-G5 in Enclosure (H x W x D) | 3.66 in x 3.94 in x 1.46 in (93 mm x 100 mm x 37 mm) | | | |
| | Weight (Card / With Enclosure) | 0.16 lb (73 g) / 0.65 lb (296 g) | | | |

TYPICAL INSTALLATION

(with Ethernet Network Card in Inverter Wire Box)



DIN RAIL ENCLOSURE

(included for use with Third Party Enclosure)

