ABB monitoring and communications VSN300 Wifi Logger Card



The VSN300 Wifi Logger Card is a new, advanced expansion board for ABB's UNO and TRIO string inverters which provides residential and commercial users with an advanced and cost-effective solution for monitoring and controlling their photovoltaic system.

The VSN300 Wifi Logger Card is easy to install, for new and most existing string inverters by using the inverter's internal expansion slot.

The built-in IP networking connectivity and innovative Wi-Fi commissioning techniques enable this card to be easily configured for most Wi-Fi networks and access points without installing any additional external devices.

Complete, remote and local monitoring with Wifi Logger Card and new free mobile app.

Users have a complete remote and local monitoring experience when combining VSN300 Wifi Logger Card with ABB's new free mobile app; "Plant Viewer for Mobile". It is available for both iOS and Android based devices.

The local web server in VSN300 Wifi Logger Card adds the ability to use a standard web browser to access inverter data.

The Wi-Fi Certified™ mark assures interoperability, security, easy installation, and reliability. With innovative commissioning and upgrade features, the VSN300 Wifi Logger Card provides the best user experience for ABB's customers.

Not only is the VSN300 Wifi Logger Card suitable for most of ABB's string inverters currently deployed, 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.

Highlights

- The Wi-Fi Certified™ mark assures interoperability with IEEE 802.11b/g/n networks over the 2.4GHz band
- Easily installed on new and existing UNO and TRIO string inverters
- IEEE 802.11b/g/n (2.4 GHz) support
- Local, remote monitoring in one solution
- High performance non-volatile data logging
- High-speed inverter data exchange through Hyperlink [where available]
- Modbus TCP server for SCADA integration
- SunSpec certified Modbus mapping for easy integration
- Secured and encrypted data transfer to Aurora Vision® Plant Management Platform



Additional highlights

- Remote reading and writing of inverter parameters for advanced operations
- California Rule 21 ready



Technical data and types

| Type code | VSN300 Wifi Logger Card |
|-----------|-------------------------|

| Ser interface Wi-Fi Certified™ IEEE 802.11 b/g/n (2,4 GHz) Communication protocols Protocolli LANWAN HTTPS, DHCP, NTP, SSL, SSH, XML, Modbus TCP (Sunspec) Monitoring Web user interface (WUI) Integrated Serencte monitoring wirelessly allowed via any Wi-Fi® device connecting the integrated WUI or running Plant Viewer for restate Beneforte monitoring Plant Portfolio Manager® / Plant Viewer for restate Beneforte monitoring Plant Portfolio Manager® / Plant Viewer for restate Beneforte monitoring Plant Viewer for restate Beneforte of grade ability Plant Viewer for restate Beneforte of grade as ampling (less than 1 minute average) Log data for 30 days based on 15-minute intervals Beneforte of grade as Aurora Vision® Plant Management Platform / Locally via Web User Interface Wavanced functionalities Beneforte of functionalities Grid control power-management enabled Power supply Cower supply Cower supply output ~2W Environmental parameters Without temperature range [-20; +85] °C Environmental parameters Weblant temperature range [-20; +85] °C Environmental parameters (per unit) Divinensions (H x W x D) 3.81° x 1.81° x 0.63° (97 mm x 46mm x 16mm) Weight 0.06 lbs (269) Womensions (H x W x D) 3.81° x 1.81° x 0.63° (97 mm x 46mm x 16mm) Weight 0.06 lbs (269) Womensions (H x W x D) 5.82 (EA) (1878 22, EN) 55022 Conducted and radiated emission | Communication interfaces | |
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| Annitoring We user interface (WUI) Accal monitoring We luser interface (WUI) Accal monitoring Plant Portfolio Manager® / Plant Viewer *** / Pl | User interface | Wi-Fi Certified™ IEEE 802.11 b/g/n (2,4 GHz) |
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| wirelessly allowed via any Wi-Fi® device connecting the integrated WUI or running Plant Viewer for mobile Plant Portfolio Manager® / Plant Viewer™ / Plant Vi | Monitoring | |
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| Data logging specifications Data sampling rate | Local monitoring | wirelessly allowed via any Wi-Fi® device connecting the integrated WUI or running Plant Viewer for mobile |
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| Log data for 30 days based on 15-minute intervals Depradeability Remotely via Aurora Vision® Plant Management Platform / Locally via Web User Interface Advanced functionalities Remote 0&M operations Inverter's parameters changing / Inverter's firmware upgrade Grid control power-management enabled Power supply Do power supply output - 2W Environmental parameters Ambient temperature range [-20; +85] °C Environmental protection IP 20 Relative humidity Restaurant (Parameters (per unit) Dimensions (H x W x D) 3.81' x 1.81' x 0.63' (97 mm x 46mm x 16mm) Veight O.06 lbs (26g) Mounting System CE / FCC / RCM / Wi-Fi Certified® FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Data logging specifications | |
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| Advanced functionalities Remote O&M operations Remote O&M operatio | Local data storage | Log data for 30 days based on 15-minute intervals |
| Inverter's parameters changing / Inverter's firmware upgrade Smart grid functionalities Grid control power-management enabled Cower supply Copower supply output 2W Convironmental parameters Ambient temperature range [-20; +85] °C Convironmental protection IP 20 Relative humidity 285% Non-condensing Acchanical parameters (per unit) Compliance Marking CE / FCC / RCM / Wi-Fi Certified™ FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Upgradeability | Remotely via Aurora Vision® Plant Management Platform / Locally via Web User Interface |
| Grid control power-management enabled Cower supply Copower supply output Copower supply Copower supply output Copower supply Copow | Advanced functionalities | |
| Power supply OC power supply output - 2W Environmental parameters Ambient temperature range Environmental protection Relative humidity Achanical parameters (per unit) Dimensions (H x W x D) Weight Output | Remote O&M operations | Inverter's parameters changing / Inverter's firmware upgrade |
| Copower supply output | Smart grid functionalities | Grid control power-management enabled |
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| Environmental protection Relative humidity Acethanical parameters (per unit) Dimensions (H x W x D) Veight Acounting System Arking CE / FCC / RCM / Wi-Fi Certified™ FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Environmental parameters | |
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| Mechanical parameters (per unit) Dimensions (H x W x D) 3.81' x 1.81' x 0.63' (97 mm x 46mm x 16mm) Veight 0.06 lbs (26g) Mounting System inverter's expansion slot Compliance Marking CE / FCC / RCM / Wi-Fi Certified™ FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Environmental protection | IP 20 |
| Dimensions (H x W x D) 3.81' x 1.81' x 0.63' (97 mm x 46mm x 16mm) Veight 0.06 lbs (26g) Mounting System inverter's expansion slot Compliance CE / FCC / RCM / Wi-Fi Certified™ Emissions FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Relative humidity | <85% Non-condensing |
| Veight 0.06 lbs (26g) Mounting System inverter's expansion slot Compliance CE / FCC / RCM / Wi-Fi Certified™ Emissions FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Mechanical parameters (per unit) | |
| Mounting System inverter's expansion slot Compliance Marking CE / FCC / RCM / Wi-Fi Certified™ Emissions FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Dimensions (H x W x D) | 3.81' x 1.81' x 0.63' (97 mm x 46mm x 16mm) |
| Compliance Marking CE / FCC / RCM / Wi-Fi Certified™ Emissions FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Weight | 0.06 lbs (26g) |
| Marking CE / FCC / RCM / Wi-Fi Certified™ Emissions FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Mounting System | inverter's expansion slot |
| FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission | Compliance | |
| | Marking | CE / FCC / RCM / Wi-Fi Certified™ |
| mmunity EN55024 | Emissions | FCC Part 15 Class B, CISPR 22, EN 55022 Conducted and radiated emission |
| <u> </u> | Immunity | EN55024 |

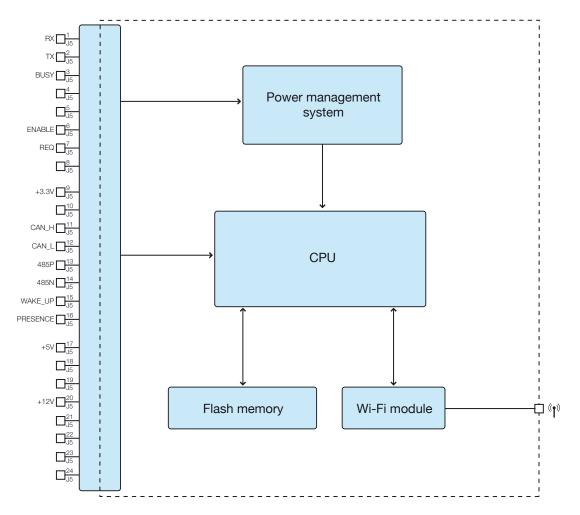
Remark. Features not specifically listed in the present data sheet are not included in the product

Application with VSN300 Wifi Logger Card



Inverter matrix compatibility

| Inverter family | Monitoring | Remote O&M Operations |
|-----------------|------------|-----------------------|
| UNO-2.0 | Yes | No |
| UNO-2.5 | Yes | No |
| PVI-3.0 | Yes | No |
| PVI-3.6 | Yes | No |
| PVI-3.8 | Yes | No |
| PVI-4.2 | Yes | No |
| PVI-4.6 | Yes | No |
| PVI-5000 | Yes | No |
| PVI-6000 | Yes | No |
| PVI-6.0 | Yes | No |
| PVI-8.0 | Yes | No |
| PVI-10.0 | Yes | No |
| PVI-12.5 | Yes | No |
| TRIO-5.8 | Yes | Yes |
| TRIO-7.5 | Yes | Yes |
| TRIO-8.5 | Yes | Yes |
| TRIO-20 | Yes | No |
| TRIO-27.6 | Yes | No |



Support and service

ABB supports its customers with dedicated, global service organization in more than 60 countries and strong regional and national technical partner networks providing complete range of life cycle services.

For more information please contact your local ABB representative or visit:

www.abb.com/solarinverters

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