

# solarnode

## GREENSTAGE ENTERPRISE MONITORING

Greenstage implements its datalogging, logic and remote switching services using the enterprise SolarNetwork® platform. The client-side data acquisition unit or SolarNode is the rugged and versatile “swiss army knife” of dataloggers/gateways, exhibiting easy-to-use browser based administration, unparalleled integration capabilities, modular hardware design, a proven security model and heterogeneous hardware support.

Also available is optional full access to a comprehensive SDK for developers to extend the functionality and customise branding. This allows any company to go beyond the core functions of the default SolarNode and to provide a deep integration with existing devices, platforms, and marketing collateral.

Asset managers rely on SolarNode because it breaks their data out of the silos seen in typical vendor solutions. Sick of using a range of different data logging solutions from different vendors, needing to manually download CSV files or access a range of different websites? The SolarNode leverages Open APIs to push collected data to your own cloud storage account, your data, from a range of assets that you manage is then available via web portal tools and more importantly, via powerful programmable APIs. All of this is offered at very low cost with no hardware or software license lock-in.

Distributed generation pros use SolarNode because it gives them an easy starting point and more importantly, flexibility to go beyond. They have the power to synthesize new user interfaces from the mixing and matching of data sources. Owner/operators love SolarNode because it saves them time as a durable and remotely upgradable solution that squeezes the most out of the business systems they use today, with a dependable path to future technologies.



- No limit to the number of devices that can be monitored.
- Multiple nodes can be deployed to monitor large distributed sites or extremely large numbers of devices.
- A single node can monitor over 200 devices.
- Uses plugin technology to support and communicate with all devices.
- Can communicate with any device which supports an external interface (e.g. modbus, RS485, RS232, Ethernet, XML, JSON etc).
- Small and lightweight.
- Easy to install.
- Highly secure using best of breed technology.
- Remote support and updates.
- Internet connection via Ethernet, Wifi or cellular options.
- Easy access web portals (plus optional tailored business sites available for special project demands and marketing requirements).



## TECHNICAL DETAILS

Power	5 VDC, 2.4A
Mounting System	DIN-rail: 35 mm, Wall-mount
Communication Interfaces	USB 2.0, Ethernet, 802.11n Wifi
Additional Protocols	Modbus, RS485, RS232, TCP/IP, SOAP, XML, JSON
Ethernet connector	1 x RJ45 10/100 MBPS
SD Media	Industrial SLC 2GB (optional 4GB for high volume off-line data)
Software	SolarNetwork on minimal Debian OS (Open Source, no hardware or software license lock-in)
Security	HTTPS, TLS 1.0, X.509 client certificates
Enclosure materials	UL94V-0 self extinguishing PPO and PC Material
Emissions	Complies with Part 15 of FCC rules class B.
Dimensions	91(L) x 72 (W) x 62 (H) mm
Weight	105g

Operating Temperature Range	0°C to 70°C standard (optional -34°C to 70°C)
Protection Rating	IP 20, NEMA Type 1 (optional enclosures available for extreme environments meeting NEMA Type 4X and supporting extreme cold to -34°C).
Compliance	<ul style="list-style-type: none"><li>- Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU.</li><li>- Health and Safety (Art.3(1)(a))</li><li>- EN60950-1:2006/A11:2009/A12:2010/A12:2011/A2:2013.</li><li>- EN62311:2008 Electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0Hz-300Ghz).</li><li>- EMC (Art 3(1)(b)).</li><li>- EN55032:21012; EN55024:2010 (with reference to EN301489-1v1.9.2 &amp; EN301489-17v2.2.1).</li><li>- SPECTRUM (Art 3(2)).</li><li>- EN300 328 v2.1.1 covering wide band transmission systems and data transmission equipment operating in the 2.4GHz ISM band.</li></ul>
Warranty	5 years