Q.LOG

RELIABLE MONITORING AND CONTROL OF SOLAR PLANTS AND ENERGY SYSTEMS

> Q.LOG supports the monitoring and control of a large number of inverters, electricity meters, sensors and other components in renewable energy generation systems. The user was at the centre of the development - economy and simple installation are the result: Unnecessary components have been removed and helpful functions - such as a built-in direct marketing interface, without the need for an additional VPN modem - have been integrated. By using Q.LOG Vision, Q.LOG can configure itself and keep itself up to date after entering a setup key - the number and duration of on-site operations is thus drastically reduced.



THE IDEAL SOLUTION FOR:









Ground-mounted solar power plants



EASY SETUP

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5-minute setup via smartphone or laptop

PLUG & PLAY

The device configures itself securely via the digital twin in Q.LOG Vision on site. LTE router and LTE compatibility with all networks are already included in the standard package.

LOW DATA CONSUMPTION

The logger uses differential and compressed uploads of raw data via an optimised protocol to ensure a low consumption of mobile data volume.

CONFIGURATION AND DATA BACKUP ON SD CARD

Cache of at least one month in case of Internet connection failure.

AUTOMATED SOFTWARE FEATURES

Automatic plant detection, automatic over-the-air updates (OTA), automatic monitoring of the operating status and Monitoring, configuration and control in real-time via Q.LOG Vision.

SAFETY

TLS encryption (client and server certificate are verified).

CONTROL OF THE INVERTERS

Limitation of active and apparent power taking into account self-consumption.



TECHNICAL DATA

Housing	157mm × 86mm × 60mm (Lexan rail housing)
Weight	150g
Power supply	5 V, 2 A max.
Electricity consumption	<2W typical, 10W max.
Protection class	IP20
Operating range	-20°C to 60°C, <80% relative humidity
Installation	DIN rail or wall mounting
ESD protection	Optional

CONNECTIONS

Network	Wireless LAN (802.11n, 2.4 GHz)
Serial communication	3 × RS485 bus
Digital inputs	4 × potential-free with common ground (e.g. for Ripple Control / power limitation), 4 × potential-free, isolated (e.g. for S0 meters) all galvanically isolated
Analogue inputs	$4 \times 18\text{bit}$ differential analogue inputs $\pm 2.048\text{V}$ (for external sensors, adapter for 4–20 mA and 10 V on request)
Extension possibilities	Internal connectors with UART, I2C and SPI interfaces

USER INTERFACES

Configuration	Via WiFi/web interface with smartphone, tablet or laptop
Status LEDs	7 \times specific status LEDs, 1 \times general RGB status LED
Switch	1 × Reset, 1 × Reset to factory settings
Jumpers	3 × Terminating resistors and bias voltage for RS485

SYSTEM SIZE

Maximum peak power	No limit*	
Maximum inverters per data logger	100 per port**	
S0 counter	4**	
*depends on license **expandable by using several data loggers, partly limited by inverters		

EXAMPLE OF SOME SUPPORTED INVERTER BRANDS











EXEMPLE OF SUPPORTED INVERTER BRANDS UNDER SUNSPEC ALLIANCE





Specifications subject to technical changes @ Q CELLS Data_sheet_Q.LOG_2020-12_Rev01_EN

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