

REFUlink

Central interface for PV systems

REFUlink is the central control unit for PV systems. Power control via Modbus TCP/IP and DRM, as well as integration with REFUview, enable full system control.



Central plant control and monitoring



Operable in slave mode under existing gateways



EU-compliant, cross-system and secure architecture



For utility-scale, C&I, and repowering applications.

With increasing regulatory requirements, the demand for secure remote monitoring and transparent plant control is growing. REFUlink provides the technical foundation for this and integrates both new and existing inverter generations into a central system architecture.

In combination with REFUview, this creates a comprehensive monitoring and data platform with real-time access to all relevant operational data. Hosting and data processing take place in Germany and comply with current data security and regulatory requirements.



System Control & Grid Integration

- Power control via Modbus TCP/IP
- DRM control (0%, 30%, 60%, 100%)
- Grid operator integration
- Grid-compliant operation according to grid codes
- Dynamic power management



Monitoring & System Architecture

- REFUview monitoring platform
- Central remote monitoring
- Real-time data and plant analysis
- Integration into existing systems
- Hosting and data processing in Germany



Integration & System Compatibility

- Integration of all REFU inverters
- Operation in mixed system configurations
- Connection via RS485 and LAN networks
- Central communication structure for all devices

TECHNICAL DATA

Art. No.	REFUlink Core 924032	REFUlink Plus 924031	REFUlink Ultra 924030
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FUNCTIONALITY

Monitoring through REFUview portal	■	■	■
Communication with REFUsol inverters (RS485 / Ethernet ¹)	■	■	■
Active / reactive power controlled via Modbus (TCP/IP)	■	■	■
DRM control via 4 digital inputs	■	■	■
Data storage		16GB	
Number of connected devices	1 ~ 6	7 ~ 30	>30 ⁵
Remote configuration	■ ⁴	■ ⁴	■ ⁴

COMMUNICATION

USS ²	■	■	■
MODBUS	■	■	■
USS + RTP	■ ¹	■ ¹	■ ¹

INTERFACES

Digital inputs	4	4	4
RS485 interface	1	1	1
Ethernet interface	1	1	1
Number of bus lines supported	1	1	1
Max. span (end to end) of bus line per baud rate [bps(m)] ³		9600 (1000) 57600 (167)	
Mixed baud-rate and protocol support on same bus	■	■	■
Compatible with third party plant controllers	■ ⁶	■ ⁶	■ ⁶

ELECTRICAL DATA

Power supply	PS Adapter – Type C – 5V DC / 15 W
AC nominal input voltage range (V)	100 ... 240
Frequency range AC (Hz)	45 ... 65
Max. used power (W)	> 10 W
Typical max. current (mA)	> 250 mA

GENERAL DATA

Dimensions W x H x D (mm)	115 x 33 x 125
Weight (kg)	< 0,5
Housing	Black sheet metal
Installation method	Wall – mounted (indoor use)
Protection class	III
Ambient temperature range operation (°C)	-25 ... 55
Ambient temperature range storage / transport (°C)	-25 ... 85
Warranty	2 years

¹ Only for legacy REFUsol (GEN 1, GEN 2) inverters with internal datalogger and ethernet port.

² USS protocol supports maximum 32 participants in the bus including the master.

³ The end-to-end length between first or master inverter up to the last slave inverter can be increased with the use of repeaters.

⁴ Only for new REFUsol (GEN 3, GEN 4) inverters without integrated internal datalogger and ethernet port.

⁵ The max. number of devices which can be connected are >30 and ≤60.

⁶ The compatible devices include – Solarlog, Meteocontrol, Smartone.