

PV-Display for Fronius with Portal connection

The display unit is equipped with two cables, each about 3 m long, which provide the connection to mains and to the Ethernet adaptor. The RS-485-Ethernet-Adaptor has to be installed indoors only, together with an external power supply (see schematic below).

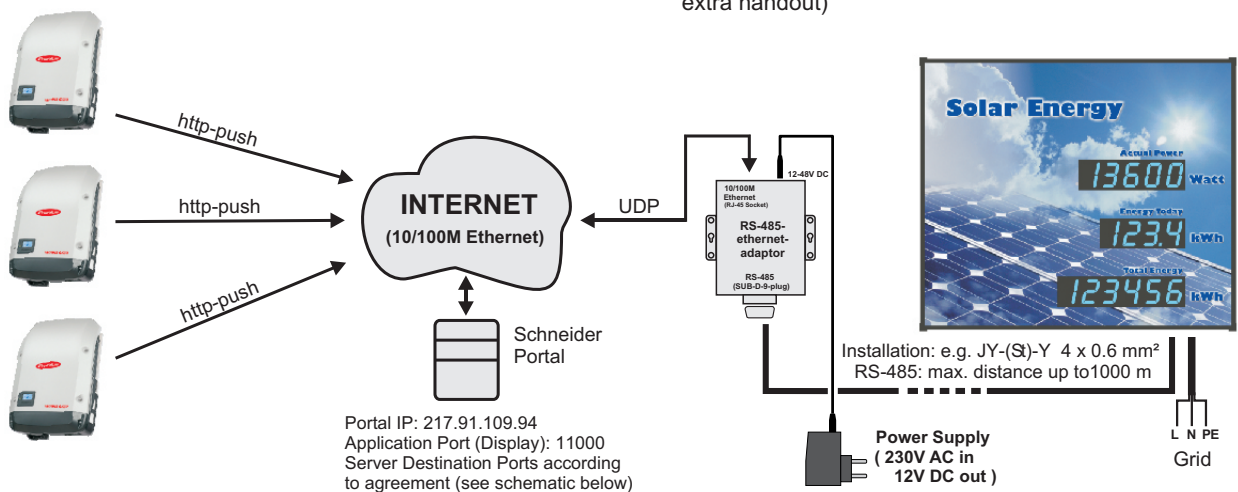
There is a bidirectional serial communication between adaptor and display unit. You can prolong the data connection with an appropriate installation cable e.g. JY-(St)-Y 4 x 0.6 mm².

For connection to the D-sub 9 plug of the Moxa an adaptor cable will be delivered with the display.

Several locations/plants with Fronius inverters (Galvo or Symo) and integrated DataManager2

Ethernet Adaptor
Moxa 5130
(configuration: see extra handout)

PV-Display (Schneider)



Line Cable H03VV-F3 x 0.75 mm ²	brown ↔ blue ↔ yellow/green ↔	L N PE	Mains 220-240V, 50/60 Hz LCD: typ. 1,5 Watt LED: typ. 11 Watt
Data Cable RS-485 3x 0,5mm ²	brown A ↔ blue B ↔ grey Gnd ↔	brown A (Pin 3) blue B (Pin 4) grey Gnd (Pin 5)	Interface RS-485 Ethernet adaptor N-Port 5130 Moxa
	DISPLAY UNIT	ADAPTOR CABLE + NPORT5130	

The Concept of Data Collection:

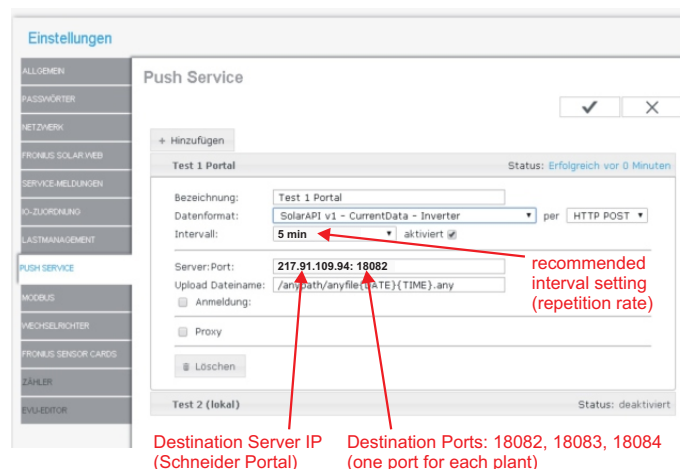
The Fronius Datalogger at each location/plant has to be adjusted to a PUSH SERVICE function: Please activate HTTP POST and the data format "SolarAPI v1" for the "CurrentData". Via Browser User Interface (see picture in the right hand column) You can establish server address and port. The several push services should all utilize the same server destination IP, but different ports, see picture.

Inside the portal the several plants are summarized thus providing the data for the visualization such as "actual power", "daily energy" and "total energy", which are shown on the Portal Display.

Additionally a CO₂- equivalent value can be calculated from the total energy. The appropriate factor for this is stored inside the portal. Preadjusted: 0.563 kg/kWh.

Network Communication:

The local communication of the Fronius datalogger to the inverters and via Modbus TCP (Port 502) to a local display is independent from this Push Service.



Safety Information:

Mounting of the display unit by skilled staff only.
Relevant rules for electrical safety have to be followed.
Disconnect from mains before opening.