

ACCESSORIES FOR INVERTERS

/ Our accessories complement all PV systems, simplify installation and ensure that the system meets the required safety standards.

FRONIUS STRING CONTROL 100/12

/ Professional monitoring of up to 12 strings

The Fronius String Control 100/12 can be used for the comprehensive monitoring and recording of up to 12 strings at a current carrying capacity of up to 100 A. Continuous comparison of string currents reliably detects even the smallest errors in the entire system.

Area of application: For Fronius IG Plus inverters.



TECHNICAL DATA	
Max. number of strings	12
Max. input current	100 A
Max. input current per string	20 A
Max. input voltage	600 V
Max. current per measuring channel	50 A
Number of measuring channels	2
Connections (DC in)	Terminals, 1.5 – 10 mm ² (with max. cable diameter of 7 mm) ¹⁾
Connections (DC out)	M12 cable lug, max. 95 mm ²
2x RS422 (RJ45 socket)	Fronius Solar Net
Ambient temperature range	-25 – +60 °C
Degree of protection	IP 55
Power supply	12 V DC (optional)
Size (height x width x depth)	330 x 440 x 145 mm
Weight	5 kg
Item number	4,240,143

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.

FRONIUS STRING CONTROL 250/25

/ Professional monitoring of up to 25 strings

The Fronius String Control 250/25 can be used for comprehensive monitoring and recording of up to 25 strings with a total current of up to 250 A. Continuous comparison of string currents reliably detects even the smallest errors in the entire system.

Area of application: They are particularly suitable for use with Fronius central inverters.

Optional: DIN rail power pack



TECHNICAL DATA	
Max. number of strings	25
Max. input current	250 A
Max. input current per string	20 A
Max. input voltage	600 V
Max. current per measuring channel	50 A
Number of measuring channels	5
Connections (DC in)	Terminals, 2.5 – 10 mm ² (with max. cable diameter of 7 mm) ¹⁾
Connections (DC out)	M12 cable lug, max. 120 mm ²
2x RS422 (RJ45 socket)	Fronius Solar Net
Ambient temperature range	-25 – +60 °C
Degree of protection	IP 55
Power supply	12 V DC (optional)
Size (height x width x depth) incl. wall bracket	680 x 500 x 170 mm
Weight	10 kg
Item number	4,240,140

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.

FRONIUS STRING CONTROL 250/25 DCD DF

/ Professional string monitoring and all-pole string fuse protection

The Fronius String Control 250/25 DCD DF can be used for comprehensive monitoring and recording of up to 25 strings at a current carrying capacity of up to 250 A. The integrated, external DC disconnecter ensures safe isolation of the PV generator and inverter.

Area of application: Suitable for combination with Fronius central inverters.

Optional: DIN rail power pack



TECHNICAL DATA	
Max. number of strings	25
Max. input current	250 A
Max. input current per string	20 A
Max. input voltage	600 V
Max. current per measuring channel	50 A
Number of measuring channels	5
Connections (DC in)	Terminals, 1 – 25 mm ² (with max. cable diameter of 7 mm) ¹⁾
Connections (DC out)	M12 cable lug, max. 120 mm ²
2x RS422 (RJ45 socket)	Fronius Solar Net
Ambient temperature range	-25 – +55 °C
Degree of protection	IP 55
Power supply	12 V DC (optional)
Size (height x width x depth) incl. wall bracket	822 x 571 x 216 mm
Weight	18.4 kg
Item number	4,240,142

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.

FRONIUS STRING CONTROL 250/30

/ Professional monitoring of up to 30 strings

The Fronius String Control 250/30 has been specifically developed to meet the requirements of central inverters. With a current carrying capacity of 250 A and maximum input voltage of 1,000 V, the Fronius String Control 250/30 is the ideal device for the monitoring and recording of up to 30 strings when using Fronius Agilo inverters.

Area of application: Ideally suited to Fronius Agilo inverters.

Optional: DIN rail power pack, base for outdoor installation



TECHNICAL DATA	
Max. number of strings	30
Max. input current	250 A
Max. input current per string	20 A
Max. input voltage	1,000 V
Max. current per measuring channel	50 A
Number of measuring channels	5
Connections (DC in)	Terminals, 2,5 – 25 mm ² (with max. cable diameter of 7.5 mm) ¹⁾
Connections (DC out)	V-shape connection lug (V-box terminal clamp, no cable lug required), max. 240 mm ²
2x RS422 (RJ45 socket)	Fronius Solar Net
Ambient temperature range	-25 – +55 °C
Degree of protection	IP 55
Power supply	12 V DC (optional)
Size (height x width x depth)	580 x 720 x 200 mm
Weight	16.3 kg

BASE

Size (height x width x depth)	900 x 760 x 240 mm
Weight	11 kg
Item number	4,240,144

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.



FRONIUS STRING CONTROL 250/30 DCD DF

/ Professional string monitoring and all-pole string fuse protection

The current of up to 30 module strings can be professionally monitored and compared using the Fronius String Control 250/30 DCD DF. The integrated, external DC disconnecter ensures safe isolation of the PV generator and inverter.

Area of application: Ideally suited to Fronius Agilo inverters.

Optional: DIN rail power pack, base for outdoor installation

TECHNICAL DATA	
Max. number of strings	30
Max. input current	250 A
Max. input current per string	20 A
Max. input voltage	1,000 V
Max. current per measuring channel	50 A
Number of measuring channels	5
Connections (DC in)	Terminals, 2.5 – 25 mm ² (with max. cable diameter of 7.5 mm) ¹⁾
Connections (DC out)	Direct lug connection (V terminal, no cable lug required), max. 240 mm ²
2x RS422 (RJ45 socket)	Fronius Solar Net
Ambient temperature range	-25 – +55 °C
Protection class	IP 55
Power supply	12 V DC (optional)
Size (height x width x depth)	741 x 750 x 246 mm
Weight	25.2 kg
Item number	4,240,145

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.

FRONIUS DC BOX 60/12

/ String collection box for up to 12 module strings

The Fronius DC Box 60/12 can store up to 12 module strings with a total current of up to 60 A max. It can connect a DIN rail-mounted overvoltage protector (type 2 or type 1).

Area of application: Specifically for all three-phase Fronius IG Plus devices. Can also be used with other Fronius inverters.



TECHNICAL DATA	
Max. number of strings	12
Max. input current	60 A
Max. input current per string	20 A
Max. input voltage	850 V
Connections (DC in)	Terminals, 2.5 mm ² – 6 mm ² (with max. cable diameter of 10 mm) ¹⁾
Connections (DC out)	M10 cable lug, max. 95 mm ²
Environmental conditions	-25°C to +55 °C
Degree of protection	IP 65
Size (height x width x depth)	330 x 440 x 145 mm
Weight	3.8 kg
Item number	42,0300,2872

¹⁾ Depending on cable type. Please refer to the information in the operating instructions regarding correct installation.



FRONIUS IG 15/20/30 DC JUNCTION BOX

/ String collection box for up to 4 module strings with DC isolator

The Fronius IG 15/20/30 DC junction box can record up to 4 module strings. The integrated DC isolator allows both DC main line poles to be connected whilst de-energised during service.

Area of application: Particularly suitable for use with the Fronius IG 15/20/30.

TECHNICAL DATA	
Max. number of strings	4
Max. input current	400 V DC 7 A* 150 V DC 20 A*
Max. input voltage	530 V
Connections (DC in)	Terminals, 2,5 mm ² – 6 mm ² (with max. cable diameter of 10 mm)
Connections (DC out)	Terminals, 2,5 mm ² – 16 mm ²
Environmental conditions	–25°C to +55 °C
Degree of protection	IP 54
Size (height x width x depth)	220 x 168 x 115 mm
Weight	1.4 kg
Item number	42,0300,2438

* To determine input current by linear interpolation.



FRONIUS IG 40/60 HV DC JUNCTION BOX

/ String collection box for up to 8 module strings with DC isolator

The Fronius IG 40/60 HV DC junction box can store up to eight module strings. The integrated DC isolator allows both DC main line poles to be connected whilst de-energised during service.

Area of application: Particularly suitable for use with the Fronius IG 40 and Fronius IG 60 HV.

TECHNICAL DATA	
Max. number of strings	8
Max. input current at*	400 V DC 14 A* 150 V DC 37 A*
Max. input voltage	530 V
Connections (DC in)	Terminals, 2,5 mm ² – 6 mm ² (with max. cable diameter of 10 mm)
Connections (DC out)	Terminals, 2,5 mm ² – 25 mm ²
Environmental conditions	–25°C to +50 °C
Degree of protection	IP 54
Dimensions (height x width x depth)	270 x 225 x 125 mm
Weight	2 kg
Item number	42,0300,2672

* To determine input current by linear interpolation.

SYSTEM MONITORING: FUNCTION AND YIELD AT A GLANCE.

/ The Fronius DATCOM provides data communication solutions for photovoltaic systems, ensuring reliable system monitoring and straightforward integration into other systems. The hardware is quick to install and the software is intuitive to use. The solutions can be adapted to individual needs and extended at any time.



DATA- LOGGING

/ System data is recorded and saved for further processing.

REMOTE CONTROL OF PV SYSTEMS

/ System controlled to grid operator's specifications.



OPEN INTERFACES

Process data easily: integrate third-party components without any problems.

ACCESSORIES

/ Communication accessories for inverters without integrated communication.

SYSTEM MAINTENANCE

/ Professional maintenance and fault analysis

VISUALIZATION

/ Attractive system data display.



FRONIUS DATCOM

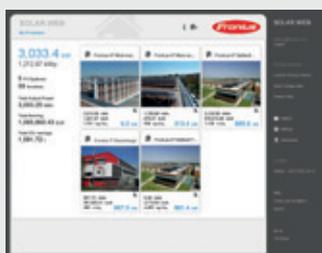
/ The complete solution for data: recording, processing, storing, displaying and analysing.

SENSORS

/ Reliable measurement of additional values: irradiation, ambient temperature, wind speed, and much more.

VISUALISATION: DISPLAYING, ANALYSING AND ARCHIVING PV SYSTEM DATA.

/ With the online monitoring tools from Fronius, the system data is available in an engaging format at any time, whether on the computer in the office, on your smartphone when you are on the road, or on your tablet at home. Intelligent analysis functions are included as a reliable means of preventing yield losses. Fronius also offers attractive solutions for local data displays.



FRONIUS SOLAR.WEB

/ The all-in-one internet portal for configuring, monitoring, analysing and visualising photovoltaic systems

PV systems can be monitored, analysed and compared quickly and easily using the free online portal Fronius Solar.web. Up-to-date system data can be accessed at any time and is clearly presented: the portal is very user-friendly and easy to use, and a comprehensive range of analysis functions is included.

The easy way of accessing the Fronius Solar.web: with WLAN directly in the inverter



FRONIUS SOLAR.WEB APP

/ The free app for the simple visualisation of PV system data

The free Fronius Solar.web app is the mobile version of the online service. You can always keep an eye on the energy yield of your PV systems by simply installing the app on your iPhone, iPod touch, iPad, Android smartphone or Android tablet PC. The app is available for Apple products on iTunes and for Android smartphones from the Android Market.



FRONIUS SOLAR.TV

/ Professional presentation of system data in public spaces

The free Fronius Solar.TV online portal enables numerous PV system values, such as energy yield and CO₂ savings to be transmitted and displayed in a promotionally effective way on standard displays in public spaces. A series of well laid out diagrams provides a quick overview of the PV system.



FRONIUS PERSONAL DISPLAY DL

/ Read system data easily, from anywhere

The Fronius Personal Display DL delivers PV system performance data. It is easy to install in any room in your house, from where it continuously provides all the up-to-date information – for up to 15 inverters. Data transfer from the inverter is via a wireless connection. That is why it is so easy to install: no tuning, no cable pulling – just Plug & Play. Data from up to 15 inverters can be transferred to a computer quickly and easily via the micro USB port.

TECHNICAL DATA

Frequency band	868 MHz; 915 MHz (USA)
Display	White backlight
Power supply (battery)	2 x 1.5 V NiMH cells
Temperature range	0°C to +50°C
Degree of protection	IP 20
Dimensions (length x width x height)	190,2 x 113,8 x 52,8 mm
Item number	4,240,132

/ Fronius Personal Display DL accessories: Fronius Personal Display Card

Transfers data wirelessly to the Fronius Personal Display DL by inserting the card into the inverter. The accompanying antenna can be fitted either directly to the inverter or close to it.

/ Fronius Personal Display DL accessories: Fronius Personal Display DL Box

Transfers data wirelessly between the Personal Display DL and the inverter. The Fronius Personal Display DL Box has a cache memory, which retains system data, even if the wireless connection is terminated.

FRONIUS SIGNAL CARD

/ Integrate warning elements easily

If there are any status changes on the inverter, the Fronius Signal Card emits an audiovisual signal, either by sounding an alarm or via a warning light. If the inverter indicates a fault, a potential-free contact is switched on and a warning signal sounds.



TECHNICAL DATA

Supply voltage	5 V DC (through solar modules)
Dimensions (length x width x height)	140 x 100 x 26 mm
Maximum relay switching characteristics	
– U (DC)	50 V
– I (DC)	1 A
– U (AC)	250 V
– I (AC)	4 A
Maximum cable cross-section	1,5 mm ² / cable
Recommended connection cable	3-pin 0,75 mm ² sheathed cable
Item number	4,240,012

DATALOGGING: THE INTERFACE BETWEEN INVERTER AND PC.

/ Fronius dataloggers record and save system data so that it can be analysed and viewed. The dataloggers therefore form the interface to the PC or internet.



FRONIUS DATAMANAGER

/ The first integrated datalogger with WLAN

The Fronius Datamanager is a plug-in card and represents the next generation of dataloggers. Whenever it is connected to the internet via a LAN or WLAN, the Fronius Datamanager sends the PV system values directly to the Fronius Solar.web online portal. This provides you with an overview of how the system is operating at all times. The Fronius Datamanager enables inverters to be connected directly to the internet via a WLAN for the first time. Furthermore, optimum system monitoring and configuration of the Datamanager can be carried out via the dedicated website on the Fronius Datamanager's integrated web server. A ripple control receiver can also be connected via the digital inputs and outputs so that the power and reactive power can be controlled remotely in accordance with power supply company requirements.

Only one inverter in 100 needs to be fitted with the Fronius Datamanager. The other inverters need a Com Card function (integrated or with a Fronius Com Card).

The Datamanager is compatible with all Fronius inverters (excl. Fronius IG TL and Fronius Agilo). The Fronius Datamanager is integrated into the Fronius Galvo and Fronius Symo inverters as standard. The Fronius Datamanager can be retrofitted to existing inverters whenever required.

TECHNICAL DATA	
Storage capacity	max. 4096 days
Supply voltage	230 V AC (+10 % / -15 %) Power supply via AC in the Fronius inverter
Energy consumption	2.2 W (with WLAN) / 1.4 W (without WLAN)
Dimensions	132 x 103 x 22 mm
Ambient temperature range	-20 - +65°C
Interfaces	LAN, 100 MBit / Fronius Solar.web, Modbus TCP, JSON Fronius Solar.Net IN Wireless standard 802.11 b/g / Fronius Solar.web Interface to ripple control receiver Interface to ripple control receiver
Item number with WLAN	Fronius IG Plus and Fronius IG: 4,240,028 Fronius CL: 4,240,026
Item number without WLAN	Fronius IG Plus, Fronius IG and Fronius CL: 4,240,025



FRONIUS DATALOGGER WEB

/ Datalogger with WLAN functionality

All-rounder: the Fronius Datalogger Web can be easily integrated into existing networks via the Ethernet interface. This can also be done using an optional WLAN stick. Up-to-date information from systems with up to 100 inverters can be read in real time. To use the Fronius Datalogger the inverters need a Com Card function (integrated or with a Fronius Com Card).

TECHNICAL DATA

Storage capacity	16 MB / max. 4,096 days
Supply voltage	12 V DC
Power consumption	Type 1.43 W
Degree of protection	IP 20
Dimensions	190 x 114 x 53 mm
Item number	4,240,123

INTERFACES

Relay output	42 V AC / 6 A 60 V DC / 400 mA 40 V DC / 1 A 30 V DC / 6 A 0.8 – 1.5 mm ² cable cross-section
External supply, terminal	12 V DC / max. 1 A, class 2 0.13 – 1.5 mm ² cable cross-section
RS422 (RJ45 socket)	Fronius Solar.Net IN
RS422 (RJ45 socket)	Fronius Solar.Net OUT
Ethernet (RJ45 socket)	LAN, 100 MBit
WLAN	Via USB WLAN stick*

*Available as an option.

/ Accessories for the Fronius Datalogger Web: WLAN sticks

For integrating the Fronius Datalogger Web into existing networks. The WLAN stick is configured using the Fronius Datalogger Web website. WLAN sticks are available for indoor and outdoor use.



SENSORS: PRECISE MEASUREMENT OF ADDITIONAL VALUES.

/ Integrating sensors into a PV system enables additional measured values, such as irradiation, ambient temperature, etc., to be recorded.



FRONIUS SENSOR CARD/BOX

/ For integrating different sensors

With the Fronius Sensor Card/Box, sensors for measuring irradiation, ambient temperature, module temperature, wind speed, etc. can be integrated into the Fronius DATCOM system.

TECHNICAL DATA		
Supply voltage	12 V DC	
Power consumption		
– Fronius Sensor Card	1.1 W	
– Fronius Sensor Box	1.3 W	
Box degree of protection	IP 20	
Dimensions (length x width x height)		
– Fronius Sensor Card	140 x 100 x 26 mm	
– Fronius Sensor Box	197 x 110 x 57 mm	
Interfaces (Fronius Sensor Box only)	Socket:	Designation:
– RS422 (Fronius Solar Net)	RJ 45	»IN«
– RS422 (Fronius Solar Net)	RJ 45	»OUT«
T1 / T2 channels		
– Sensors	PT1000	
– Measuring range	–25°C to +75°C	
– Accuracy	0.5°C	
– Resolution	1°C	
Irradiance channel		
– Measuring ranges	0 - 100 mV 0 - 200 mV 0 - 1 V	
– Accuracy	3 %	
D1 / D2 channels		
– Max. voltage level	5.5 V	
– Max. frequency	2,500 Hz	
– Minimum pulse duration	250 us	
– Operating point „OFF“ („LOW“)	0 - 0.5 V	
– Operating point „ON“ („HIGH“)	3 - 5.5 V	
Current input channel		
– Measuring ranges	0 - 20 mA 4 - 20 mA	
– Accuracy	5 %	
Item number Fronius Sensor Card	4,240,004	
Item number Fronius Sensor Box	4,240,104	



FRONIUS IRRADIATION SENSOR

/ For measuring the radiated energy.

Item number: 43,0001,1189



FRONIUS AMBIENT TEMPERATURE SENSOR

/ For measuring the ambient temperature.

Item number: 43,0001,1188



FRONIUS MODULE TEMPERATURE SENSOR

/ For measuring the module temperature.

Item number: 43,0001,1190



FRONIUS WIND SPEED SENSOR

/ For measuring the wind speed.

Item number: 42,0411,0027

OPEN INTERFACES: STRAIGHTFORWARD DATA PROCESSING.

/ With open interfaces, third-party components can be easily integrated into PV systems. The system can then be incorporated into higher-level energy management systems, for example, and data can be exchanged easily.



FRONIUS MODBUS CARD

/ Integrate third-party components easily using Modbus RTU – SunSpec

Fronius inverters can be easily integrated into third-party systems using the Fronius Modbus Card. All PV system data is output via a standardised Modbus RTU – SunSpec protocol for processing in the next stage of the process. Installation is straightforward, so the Fronius Modbus Card can be used in both new and existing systems. If several inverters are connected in a single system, the Fronius Modbus Card is installed in every Fronius IG, Fronius IG Plus or Fronius CL inverter.

The Fronius Symo and Fronius Galvo inverters have a permanently integrated Modbus TCP interface. Furthermore, with the Fronius Datamanager, Fronius IG Plus, Fronius IG and Fronius CL inverters can also be fitted with a Modbus TCP interface.

TECHNICAL DATA		
Supply voltage	208 V / 240 V / 277 V (+10% / -15%) Power supply via AC from the Fronius inverter	
Power consumption	1.6 W	
Dimensions (length x width x height)	5.5 x 3.9 x 1.1 in. (140 x 101 x 28 mm)	
Interfaces	Socket:	Designation:
- RS422 (Fronius Solar Net)	RJ45	»IN«
- RS422 (Fronius Solar Net)	RJ45	»OUT«
- Modbus RTU	6-pin terminal	»C, TXD0, TXD1, RXD1, RXD0, V«
Connection options	Modbus RTU 2 or 4 wire	
LED Indicators		
- Power LED	Green	
- State LED	Red	
- Com LED	Yellow	
Item number	Fronius IG Plus, Fronius IG and Fronius CL: 4,240,021	



FRONIUS POWER CONTROL BOX

/ Power reduction by remote control

The Fronius Power Control Box can be connected to the grid operator's remote control device and Fronius inverters. The Fronius Power Control Box is most likely to be found in PV systems where the distance between the inverter and the ripple-control signal receiver is large. For remote controlled power reduction, a Com Card function (integrated or with a Fronius Com Card) must be installed in each inverter, and one datalogger is required per system.

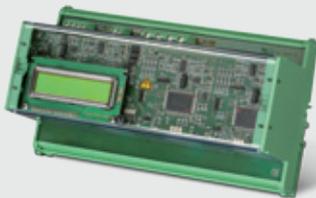
TECHNICAL DATA		
Supply voltage	12 V DC	
Energy consumption	1.3 W	
Degree of protection of box	IP 20	
Dimensions (length x width x height)	197 x 110 x 57 mm	
Ambient temperature range	0 – +50 °C	
D1 / D4 channels	Connections for floating contacts	
Current input channel*	Measuring ranges: Accuracy:	0 to 20 mA / 4 to 20 mA 5 %
Irradiation channel*	Measuring ranges: Accuracy:	0 to 100 mV / 0 to 200 mV / 0 to 1 V 3 %
Interfaces	Socket:	Designation:
– RS422 (Fronius Solar Net)	RJ45	»IN«
– RS422 (Fronius Solar Net)	RJ45	»OUT«
Connection option	2-, 3- and 4-stage ripple-control signal receivers	
Item number	4,240,120	

*Not yet supported in the latest version. This channel is intended for future upgrades.

GRID AND SYSTEM PROTECTION

/ External grid and system protection for all Fronius inverters

The German standard VDE-AR-N4105 came into force on January 1st 2012; all new PV systems rated at more than 30 kVA must now be equipped with an external grid and system protection mechanism. This mechanism detects overvoltages, undervoltages and frequency deviations at the feed-in point and, if necessary, disconnects the inverter from the grid. The inverter is reconnected automatically when the grid is within the permitted limits again.



TECHNICAL DATA	
Switching capacity	Depends on which contactors are assigned
Self-consumption	3.5 W
IP protection	IP 21
Housing	Plastic, for mounting on DIN rail
Dimensions (height x width x depth)	220 x 111 x 80 mm
Ambient temperature range	-20 °C to +40 °C, 10 – 90 % relative humidity, non-condensing
Maximum feed-in current	According to the switching capacity of the contactors

DISCONNECTS THE GRID IN THE FOLLOWING SITUATIONS (corresponds to VDE-AR-N4105 and DIN V VDE 0126-1-1/A1)	
Overvoltage	> 264 V (response time 100 ms)
Overvoltage	230 V + 10 % more than 10 minutes
Undervoltage	< 184 V (response time 100 ms)
Frequency deviation	+ 1.5 Hz / 2.5 Hz (response time 100 ms)
Item number	43,0008,0188

ACCESSORIES.

/ Communication accessories for inverters without an integrated interface.



FRONIUS COM CARD

/ Network interface card for data communication

The Fronius Com Card is the network interface card that enables Fronius inverters to communicate. Amongst other things, it provides the power supply for the entire Fronius DATCOM system. The Com Card function is already integrated into the Fronius Galvo, Fronius Symo, Fronius IG TL, Fronius CL and Fronius Agilo inverters. The Fronius IG and Fronius IG Plus inverters can be retrofitted with the Fronius Com Card as required. The Fronius Dataman-ager also has a Com Card function.

TECHNICAL DATA

Supply voltage	208 V / 220 V / 230 V / 240 V / 277 V (+10% / -15%)	
Dimensions (length x width x height) – as plug-in card only	140 x 100 x 28 mm	
Interfaces	Socket:	Designation:
– RS422 (Fronius Solar Net)	RJ45	»IN«
– RS422 (Fronius Solar Net)	RJ45	»OUT«
Item number	4,240,001	