BLUE'LOG X-1000



Art. No.: 532.001

DESCRIPTION OF FUNCTIONS

The data loggers in the X series for monitoring and controlling photovoltaic systems offer outstanding performance and flexibility as well as intuitive handling. The device records all relevant system data and also has analog and digital interfaces in order to communicate with inverters, measuring devices and sensors.
With the MX expansion modules, the data logger can be adapted to any system size and specific system requirements and offers the flexibility needed to cope with the energy scenario of the future. The plug-in system allows rapid installation and modifications with additional modules.
If system malfunctions are detected, an alert is immediately sent via e-mail or text message.
In conjunction with the meteocontrol Web Portal, the blue'Log offers the ideal basis for professional monitoring. The close links between the hardware and the portal allow the system to be configured and controlled directly using live data. The fact that the blue'Log stores system data locally and automatically retrieves data via the portal ensures maximum reliability.

TECHNICAL DATA

Power supply	10-60 V DC
Power consumption	Typically 5 W
ESD protection	Tested in accordance with DIN EN 61000-4-2 (4 kV contact discharge, 8 kV air discharge)
Operating temperature	-20 °C to 70 °C
Storage and transport temperature	-20 °C to 85 °C
Protection class	IP 20
Installation	Wall mounting, Top-hat rail installation in electrical distribution board, in control cabinets
Dimensions (W x H x D)	148 mm x 110 mm x 63 mm (including side parts)
Weight	385 g

DISPLAY / OPERATION

Display	1 (291 x 118 pixels)
LED display	3
Operating buttons / directional pad	2 / 1
Reset button	1
DIP switches (bus termination)	3 (2 x RS485/422 and 1 x CAN)

INTERFACES

Communication

2 x RS485/RS422 (interface is automatically switched and can be terminated individually)
1 x CAN (can be terminated)
1 x Ethernet (10/100 MBit)

Digital inputs
Digital Input

4 x digital inputs (mode configurable via software for each port)

The following options are available for each input:

Type	Usage	Range	Precision	Resolution
Digital	Potential-free contact	24 V DC / 20 mA		
Digital	S0	S0-compliant		

Digital outputs / multi inputs

The four ports each have a pin for a digital output, a multi input and a ground:
4 x digital outputs (mode configurable via software for each port)
4 x multi inputs (mode configurable via software for each port)

The following options are available for each digital output:

Type	Usage	Range
Digital	Open collector	Max. 60 V DC / 200 mA
Digital	Voltage output	10-60 V DC (corresponding to the supply voltage), max. 200 mA

The following options are available for each multi input:

Type	Usage	Range	Precision	Resolution
Digital	Voltage level input	0-24 V DC		
Digital	Potential-free contact	24 V DC / 20 mA		
Digital	S0	S0-compliant		
Analog	Voltage input	0-10 V DC	2 mV DC	40 µV DC
Analog	Voltage input	0-1 V DC	0.5 mV DC	4 µV DC
Analog	Voltage input	0-100 mV DC	50 µV DC	0.4 µV DC
Analog	Current input	0-20 mA	4 µA	100 nA
Analog	Resistor (PT1000)	600-1800 Ω	2 Ω	0.5 Ω

Memory

SD card slot

Service interface

USB front socket (type A)

Expandability

The system can be expanded with additional interfaces by connecting MX modules. Please note the limitations under "Software features".

POWER CONTROL

Process	Active power: P(DI), P(fix), P(AI) Intelligent power limiting (IPL): To maintain specific active power target values at the grid connection point (e.g. taking into account on-site energy consumption).

DRIVERS

Supported inverters	The system is supplied with all inverter drivers available at the time of production. These can be assigned variably to the corresponding interface on the blue'Log. The number of supported inverter manufacturers is increasing all the time. You will find further information in the blue'Log driver data sheets at http://www.meteocontrol.com/en/industrial-line/data-logger-bluelog-x-serie/bluelog-all-in-one-driver/

SOFTWARE FEATURES	X-1000	X-3000
Maximum detectable power [1]	≤ 100 kWp	≤ 1000 kWp
Number of bus devices monitored [1,2]	Max. 50	Max. 100
Number of inputs (DI/AI) monitored Basic module only [3]	Max. 8	Max. 8
Number of inputs (DI/AI) monitored Basic module and expansion modules [3]	Max. 12	Max. 20
Web Portal compatibility safer'Sun: Professional Virtual Control Room (VCOM)	 ✓ ✓	 ✓ ✓
Remote access via portal [4]	✓	✓
Visualization via websites	✓	✓
Live values	✓	✓
Websites optimized for PC and tablet	✓	✓
Online firmware update	✓	✓
ftp push [5]	✓	✓
Firmware update via USB [6]	From 01.06.2015	From 01.06.2015
Power Control active power	✓	✓
Intelligent power limiting (IPL)	✓	✓
Power Control reactive power	-	From 01.06.2015
Automatic alarms [6]	Full alarm function from 01.06.2015	Full alarm function from 01.06.2015
Direct marketer interface	Optional from 01.06.2015	Optional from 01.06.2015

[1] Limit applies to basic module and basic module with expansion modules
[2] E.g. inverter, energy meter, power quality analyzer, string monitoring unit (see blue'Log driver data sheet for max. number)
[3] E.g. sensors, ripple control receiver
[4] Function available in safer'Sun Professional and VCOM virtual control room
[5] Data transfer via ftp-push once a day, for a license fee a more frequent data transfer is possible
[6] Function will be available as a software update

MEMORY

Type	SD card
Size	16 GB

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