SOL-SC-WTH-STN - Weather station

1322110

https://www.phoenixcontact.com/in/products/1322110

Weather station for acquiring measured data from connected environmental sensors. Together with SOL-ES sensors, it can be used in PV parks or other industrial areas, for example. The measured data is made available to the user via a user interface and transmitted to a higher-level data management system.

Product description

The meteorological data acquisition system with PLCnext Control from Phoenix Contact is part of the integrated PV park management. The system can also be used as a stand-alone system.

Together with the SOL-ES-type environmental sensors, Phoenix Contact also provides a complete solution that can be integrated directly into the Phoenix Contact control system. Each sensor is in accordance with IEC 61724-1 Class A. It supplies measured data with the highest precision. The weather station is therefore ideal for use in PV parks. The station provides information on the efficiency of your photovoltaic system at all times. The sensors are connected via M12 connectors. A daisy-chain connection can be created easily using an M12 Y distributor (see the "Accessories" tab).

The application software with web-based management available separately in the PLCnext Store allows the sensors to be started up without prior programing knowledge, since all sensors connected via Modbus are detected automatically thanks to the auto-configuration feature. The integrated controller transmits the sensor data to a higher-level system via standardized protocols such as Modbus/TCP or PROFINET. With a supply voltage of 24 V DC, all sensors have reverse polarity protection.

IMPORTANT NOTE:
The application software is required to operate the weather station. You can purchase and download the corresponding licenses in the PLCnext Store (for links, see the "Downloads" tab). All desired sensors including mounting accessories (see the "Accessories" tab) have to be ordered separately.

Your advantages

- Supports high-level languages
- Standardized interfaces
- Sensor connection via M12 circular connector in industrial quality
- Installation of all compatible sensors via Plug and Play
- Flexible thanks to selectable sensors
- Easy startup without programming knowledge

Commercial data

Item number	1322110
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	*****
Product key	DTHAAA
GTIN	4063151609139
Weight per piece (including packing)	12.1 kg

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Weight per piece (excluding packing)	12.1 kg
Customs tariff number	85371091
Country of origin	DE

Technical data

Product properties

Product type	Weather station

Insulation characteristics

Protection class	I

Electrical properties

Control voltage	24 V DC
Nominal voltage U_N	230 V AC (50 Hz)
Nominal current I_N	0.95 A (at 230 V, 50 Hz)
Nominal power	220 W

Fuse

Recommended backup fuse:	16 A (Characteristic B, 1-pos.)

Dimensions

External dimensions

Width / Height / Depth	400 mm / 654 mm / 213 mm (with extensions)

Material specifications

Material Housing	Polycarbonate

Cable/line

Cable entry

Type of cable entry	Cable gland
	Connector
Connection technology	Screw connection
	Push-in connection

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-25 °C ... 50 °C
Permissible humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (up to 2000 m above mean sea level)

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Classifications

ECLASS

ECLASS-11.0	27142422
ECLASS-13.0	27370190

ETIM

ETIM 9.0	EC012357

UNSPSC

UNSPSC 21.0	39121100

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

SOL-SC-DL-1-100-2-1-1-1-0 - Data logger

1160745

https://www.phoenixcontact.com/in/products/1160745

Data logger for recording all relevant data in one PV park. With temporary data storage and automatic device detection (auto detection mode). With options for data visualization and efficient monitoring using a higher-level data management system.

SOL-SC-PCU-1-000-2-0-0 - Switchgear and controlgear assembly

1160749

https://www.phoenixcontact.com/in/products/1160749

Control cabinet solution with a PLCnext Control device. Prepared for a customer-specific application with a power generation plant controller. Basis for the feed-in management of power generation systems that feed into medium- and high-voltage grids.

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SOL-ES-PRO-PYR - Sensor

1074979

https://www.phoenixcontact.com/in/products/1074979

Lambrecht Meteo GmbH pyranometer for measuring the irradiation intensity in W/m^2 with a 180° aperture opening. The measurement value is provided via Modbus/RTU (RS-485). Corresponds to the accuracy class "Secondary Standard" in accordance with ISO 9060

SOL-ES-BSC-PYR - Sensor

1093211

https://www.phoenixcontact.com/in/products/1093211

Lambrecht Meteo GmbH pyranometer for measuring the irradiation intensity in W/m^2 with a 180° aperture opening. The measurement value is provided via Modbus/RTU (RS-485). Corresponds to the accuracy class "First Class" in accordance with ISO 9060

SOL-SC-WTH-STN - Weather station

1322110

https://www.phoenixcontact.com/in/products/1322110

SOL-ES-PRO-WD - Sensor

1074975

https://www.phoenixcontact.com/in/products/1074975

Lambrecht Meteo GmbH wind direction sensor. The measurement value is provided via Modbus/RTU (RS-485).

SOL-ES-PRO-WS - Sensor

1074976

https://www.phoenixcontact.com/in/products/1074976

Lambrecht Meteo GmbH wind speed sensor. The measurement value is provided via Modbus/RTU (RS-485).

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1322110

https://www.phoenixcontact.com/in/products/1322110

SOL-ES-PRO-THP - Sensor

1074977

https://www.phoenixcontact.com/in/products/1074977

Temperature, humidity, and air pressure sensor from Lambrecht Meteo GmbH, including holder. The measured value is provided via Modbus/RTU (RS-485).

SOL-ES-PRO-RF - Sensor

1074978

https://www.phoenixcontact.com/in/products/1074978

Lambrecht Meteo GmbH precipitation sensor with weighing technology, for measuring precipitation amounts and intensities, unheated. The measured value is provided via Modbus/RTU (RS-485).

SOL-SC-WTH-STN - Weather station

1322110

https://www.phoenixcontact.com/in/products/1322110

SOL-ES-PRO-RC - Sensor

1074982

https://www.phoenixcontact.com/in/products/1074982

A IMT Technology GmbH silicon solar radiation sensor, type Si-RS485TC-T-MB, used to measure the irradiation intensity in W/m^2. The measurement value is provided via Modbus/RTU (RS-485).

SOL-ES-PRO-MT - Sensor

1074983

https://www.phoenixcontact.com/in/products/1074983

Lambrecht Meteo GmbH PV module temperature sensor consisting of Pt 100 Modbus converter and Pt 100 temperature sensor. The measurement value is provided via Modbus/RTU (RS-485).

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SOL-ES-TRA-750 - Holder

1074980

https://www.phoenixcontact.com/in/products/1074980

Traverse with Lambrecht Meteo GmbH mast holder, length: 750 mm, comprising anodized aluminum and stainless steel components. Suitable for accommodating weather sensors from the SOL-ES series.

SOL-ES-SENSOR-HOLDER-SMALL - Holder

1406698

https://www.phoenixcontact.com/in/products/1406698

Sensor bracket from Lambrecht Meteo GmbH, stainless steel, small. Suitable for accommodating certain weather sensors of type SOL-ES, see accessories.

SOL-SC-WTH-STN - Weather station

1322110

https://www.phoenixcontact.com/in/products/1322110

SOL-ES-SENSOR-HOLDER-LARGE - Holder

1406811

https://www.phoenixcontact.com/in/products/1406811

Sensor bracket from Lambrecht Meteo GmbH, stainless steel, large. Suitable for accommodating certain weather sensors of type SOL-ES, see accessories.

SOL-ES-SENSOR-HOLDER-INCLINED - Holder

1407252

https://www.phoenixcontact.com/in/products/1407252

Sensor bracket from Lambrecht Meteo GmbH, stainless steel, angular. Suitable for accommodating certain weather sensors of type SOL-ES, see accessories.

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SAC-5PY-F/M-F VP SH - Y distributor

1419933

https://www.phoenixcontact.com/in/products/1419933

Y distributor, 5-position, shielded, Socket straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A and Plug straight M12 SPEEDCON, coding: A, Parallel distributor

SACC-M12FS-4PL SH - Connector

1424668

https://www.phoenixcontact.com/in/products/1424668

Connector, Universal, 4-position, shielded, Socket straight M12, coding: A, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

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1322110

https://www.phoenixcontact.com/in/products/1322110

SACC-M12MS-4PL SH - Connector

1424666

https://www.phoenixcontact.com/in/products/1424666

Connector, Universal, 4-position, shielded, Plug straight M12, coding: A, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

SAC-4P-100,0-PUR/SH-0,25 - Cable reel

1535794

https://www.phoenixcontact.com/in/products/1535794

By the meter, Cable reel, shielded, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

SOL-SC-WTH-STN - Weather station

1322110

https://www.phoenixcontact.com/in/products/1322110

WP-PA HF 13,0 BK - Protective hose

3240681

https://www.phoenixcontact.com/in/products/3240681

Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inside diameter: 10 mm, Total length: 50 m

SAC-4P-M12MS/ 0,6-PUR/M12FS SH - Sensor/actuator cable

1500855

https://www.phoenixcontact.com/in/products/1500855

Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, shielded (Advanced Shielding Technology), Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 0.6 m

SAC-4P-M12MS/ 1,5-PUR/M12FS SH - Sensor/actuator cable

1500868

https://www.phoenixcontact.com/in/products/1500868

Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, shielded (Advanced Shielding Technology), Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m

SAC-4P-M12MS/ 3,0-PUR/M12FS SH - Sensor/actuator cable

1500871

https://www.phoenixcontact.com/in/products/1500871

Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, shielded (Advanced Shielding Technology), Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 3 m