



Weather Station WSC11 with Mounting Bracket.

INTRODUCTION

The WSC11 is a small weather station equipped with GPS, designed to measure sunlight (illuminance), solar radiation power, and supplementary weather data.

APPLICATION AREA

The unit is suitable for roof mounting for measurements in all directions. Data from the weather station is used for controlling both internal and external sun protection systems.

USER INTERFACE

- Communication is via Modbus RTU. See the WSC weather station package below.

FEATURES

- No moving parts.
- Compact design with an outer diameter of 130 mm.
- Built-in GPS and clock for calculating solar elevation and azimuth.
- For regulating outdoor sun protection, temperature, humidity, and wind speed are also measured by the WSC11. Wind speed sensor WTC can be ordered as an add-on when specific measurement data for facades is required.
- Conversion to current solar strength (klux and W/m²) for each facade orientation is done via Lindinvent's central unit and the LINDINSHADE software.
- Supplied with a stainless steel mounting bracket.
- Supplied with a 10 m connection cable for connection to a Modbus converter. See the WSC weather station package below.
- Powered with 24 VDC. See the WSC weather station package below.

WSC WEATHER STATION PACKAGE

Necessary accessories for the WSC11 can be ordered separately, but to facilitate and reduce the risk of errors during installation and ordering, equipment should be ordered as a WSC weather station package.

The package includes the weather station along with the B-IMG connection box for Modbus conversion. The box contains a Modbus converter and a pre-installed 24 VDC transformer. The box includes a connected network cable and a cable for plug connection to 230 VAC. See the external connection diagram.

TECHNICAL SPECIFICATIONS

Measurements

Sunlight (illuminance): 1 to 150 klux
 Global solar power: 0 to 1300 W/m²
 Twilight: 0 to 500 lux (can control exterior lighting)
 Wind speed: 0 to 40 m/s
 Wind direction: 0 to 360°
 Outdoor temperature (PT1000): -30 °C to +60 °C
 Precipitation: 0 or 1
 Air pressure: 300 to 1100 hPa

Humidity

Relative: 0 to 100 %
 Absolute: 0 to 400 g/m³
 Dew point: -30 °C to +60 °C

Communication

- RS485 (Modbus RTU)
- Built-in low-power GPS with antenna

General

Dimensions: outer diameter 130 mm
 Material: Polycarbonate (housing)
 Circuit board: FR4
 Net weight: 0.22 kg
 IP rating: IP64 in mounted position
 Ambient temperature limits: -30 °C to +60 °C

Electrical System

Supply voltage: 24 VDC
 Power: <3 W
 CE marking: Complies with EMC and low voltage directives

ACCESSORIES

Mounting bracket: stainless steel, 250x42 mm
 Cables: 10 m, shielded, connector on the instrument side, open on the receiver side

COMPLEMENTARY DOCUMENTATION

Document can be viewed on the product page at www.lindinvent.com

Document	Comments
Installation instructions	Documentation is included with the WSC11 and the connection box.
Operation instructions	Please refer to the design guidelines for sun protection and the specific documentation for the LINDINSHADE sun protection module.
Maintenance instructions	Considered maintenance free.
External connection diagram	Shows the connection of coloured wires.
Environmental product declaration	For assessment at Byggsvarubedömningen in Sweden.
AMA-text	Available in swedish.