

IMPORTANT!

Before operating and installing the instrument, download and read carefully the operational manual: Internet connection is required to access the operational manual.



Explanation of warnings

To avoid personal injury and material damage, you must observe the safety information and warnings in the operating manual. The warnings use the following danger levels:

WARNING

WARNING

This indicates a potentially hazardous situation. If the hazardous situation is not avoided, it may result in death or serious injuries.

CAUTION

CAUTION

This indicates a potentially hazardous situation. If the hazardous situation is not avoided, it may result in moderately serious or minor injuries.

NOTICE

NOTE

This indicates a situation from which damage may arise. If the situation is not avoided, products may be damaged.

1. General safety instructions

1.1. Intended use

The RT1 radiometer is used to measure solar irradiance on a plane surface and is particularly suitable for monitoring rooftop PV installations.

1.2. Potential misuse

Any use of the product that does not comply with the intended use, be this intentional or negligent, is forbidden by the manufacturer.

- Use the product only as described in the operational manual.

1.3. Personnel qualification

The equipment described in the manual must be installed, operated, maintained and repaired by qualified personnel only.

- Obtain training from OTT HydroMet if necessary.

1.4. Operator obligations

The installer is responsible for observing the safety regulations. Unqualified personnel working on the product can cause risks that could lead to serious injury.

- Have all activities carried out by qualified personnel.
- Ensure that everybody who works on or with the product has read and understood the operational manual.
- Ensure that safety information is observed.
- File the operational manual together with the documentation of the entire system and ensure that it is accessible at all times.

1.5. Personnel obligations

To avoid equipment damage and injury when handling the product, personnel are obliged to the following:

- Read the operational manual carefully before using the product for the first time.
- Pay attention to all safety information and warnings.
- If you do not understand the information and procedure explanations in the manual, stop the action and contact the service provider for assistance.
- Wear the necessary personal protective equipment.

1.6. Correct handling

If the product is not installed, used and maintained correctly, there is a risk of injury. The manufacturer does not accept any liability for personal injury or material damage resulting from incorrect handling.

- Install and operate the product under the technical conditions described in the operational manual.
 - Do not change or convert the product in any way.
 - Do not perform any repairs yourself.
 - Get OTT HydroMet to examine and repair any defects.
 - Ensure that the product is correctly disposed of. Do not dispose of it in household waste.
- 1.7. Working outdoor Installation and maintenance at great heights
The product will be mounted and maintained in a certain height. Therefore, there is a risk of falling down.
- Observe and follow the local safety regulations.
 - Use suitable safety equipment.
 - Inspect the safety equipment before use.
 - Secure the person mounting or maintaining the device against falling down.
 - Secure the device against falling down.

2. Certification

2.1. CE (EU)

The equipment meets the essential requirements of EMC Directive 2014/30/EU.

2.2. FCC (US)

FCC Part 15, Class "B" Limits

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

1.3. IC (CA)

Canadian Radio Interference-Causing Equipment Regulation, ICES-003, "Class B"

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations

3. Notes on disposing of old devices

3.1. Member States of the European Union

In accordance with the German Electrical and Electronic Equipment Act (ElektroG; national implementation of EU Directive 2012/19/EU), OTT HydroMet takes back old devices in the Member States of the European Union and disposes of them in the proper manner. The devices that this concerns are labeled with the following symbol:

For further information on the take-back procedure contact OTT HydroMet.



3.2. All other countries

Dispose of the product in the proper manner following decommissioning.

- Observe the country-specific regulations on disposing of electronic equipment.
- Do NOT dispose of the product in household waste.

4. Electrical installation

4.1. Grounding pyranometer

NOTICE

Damage due to power or ground loops!

If the instrument is connected to multiple readout devices, this can cause power or ground loops that can damage the instrument. Use either the analog or the digital output.

- Observe the maximum differential voltage of 70 V DC between one of the two Modbus® RS-485 lines (yellow and gray) and the power ground (black) or RS-485 common line (blue).

4.2. Connecting to computer

NOTICE

Damage due to lack of insulation!

The power supply units of portable computers such as laptops can generate large voltage peaks. This may cause damage to the instrument's digital interface.

- Ensure that the converter has galvanic separation between the inputs and outputs