



Infrared Precipitation Sensor

MANUAL



State: August 2019

This manual belongs to the Infrared Precipitation Sensor that can be optionally purchased to the bat-monitoring device BATmode S+/2S+ and is used to measure the precipitation intensity at wind turbines. Please read these instructions completely and carefully before mounting the Infrared Precipitation Sensor. The safety instructions contained within must be observed!

SAFETY INSTRUCTIONS



- Ensure a secure mounting of the precipitation sensor and of the power supply. Dropping parts can harm persons or equipment.
- Ensure that nobody can stumble on the precipitation sensor, the power supply or installed power cable. Stumbling can harm persons and damage system parts.
- Only use accessories supplied or authorized by bat bioacoustic technology. The use of unauthorized accessories may damage the device.
- Please contact our support if the precipitation sensor or the power supply show any damage or does not work properly. Do not open system parts and try to repair damage by yourself or through unauthorized personnel. This will cause the loss of warranty.
- When working on/in electrical plants, always follow the five safety rules in accordance with EN50110: 1. Disconnect mains 2. Secure against being switched on again 3. Determine voltage free status 4. Earth and short-circuit 5. Provide protection by covers or barriers for any neighboring live parts.
- Keep the power supply away from rain or moisture. Ingress of water may cause an electrical shock.
- To pull the power plug from the socket, pull the power plug directly, never pull the power cable.
- Do not expose the equipment to extreme temperatures, solar radiation, humidity or moisture.
- A qualified professional who is familiar with the general rules of technology and the applicable law, regulations and standards and complies may only perform installation, electrical connection and wiring of the product.

1. Scope of delivery

- Infrared Precipitation Sensor 5.4103.20.041 of Adolf Thies GmbH & Co. KG with pre-assembled power and data cables for connection to a BATmode S+/2S+
- 24 V DC DIN rail power supply 787-712 of Wago
- Power supply power cable

2. Mounting of the Infrared Precipitation Sensor

Required tools: screwdriver

The precipitation sensor is designed for mounting on a mast tube or rod. During installation it must be ensured that the precipitation can reach the sensor area (the area between the two legs of the U-shaped sensor) undisturbed.

3. Mounting of the DIN rail power supply

Required tools: none

The power supply is mounted on a DIN rail or on the integrated rail of the optionally available BATbox S by clipping the hook that is attached to the back of the power supply to the DIN rail and pressing the power supply down. The power supply snaps into place hearable.

Dismounting:

By pulling the bottom-mounted flap the release of the DIN rail mounting is pressed. By tilting the power supply to the front, this can be unhooked from the DIN rail.

4. Connection of the Infrared Precipitation Sensor

Required tools: screwdriver

1. Connect the data cable of the precipitation sensor to the 4-pin connector of BATmode S+/2S+. The assignment of the connector is give in the following table:

Pin-Number	Description
1	Ground
2	Sensor output -
3	Not connected
4	Sensor output +

2. Now connect the power cable of the precipitation sensor with a screwdriver to the output of the power supply. Pay attention to the correct polarity (brown: +, blue: -), which are also shown in the figure below.

5. Connection of the power supply

Required tools: screwdriver

1. Connect the open ends of the supplied power cable with a screwdriver to the corresponding inputs of the power supply. Pay attention to the correct polarity (brown: L, blue: N, yellow-green: Ground).
2. Now connect the power cable to a 230 V socket. The power supply is switched on automatically as soon as it is connected to the power grid.

Precipitation sensor



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