

## Description

The type 8921 precipitation sensor is used for the central collection of weather data to control heaters for units that must remain capable of being moved regardless of the weather conditions (for example, points heaters or rail or any other heaters).

The unit consists of an intelligent measuring device to record the external temperature and a opto-electronic precipitation sensor. .

All the messages that are required for consumption cost-oriented and secure control of heaters are provided via two zero-potential NO-contacts. One for temperature and one for precipitation. Further there is a serial interface (RS232) implemented.

In detail, they are as follows:  
Terminal 7,8: Temperature  
The contact will be closed if the temperature will be lower than the "switch-on-temperature" and switched off if the temperature will be higher than the "switch-off-temperature"+"delta switch-off-temperature". The "switch-on-temperature" is adjustable from 0°C to 9°C. The "delta-switch-off-temperature" is adjustable from 0K to 9K.  
Terminal 9,10: Precipitation  
The sensor responds around 90 seconds after detecting precipitation in the form of rain or snow and after successfully completing the plausibility check. The drop-out delay is around 90 seconds, too.

Terminal x,y: Serial interface  
The serial interface give the user more information as the relay contacts. The information will transferred in a transparent mode. You can check the interface by connecting a PC with a simple terminal programm. For the protocol see next page.

See the complete brochure folder for additional temperature monitors and complete points heating control units.



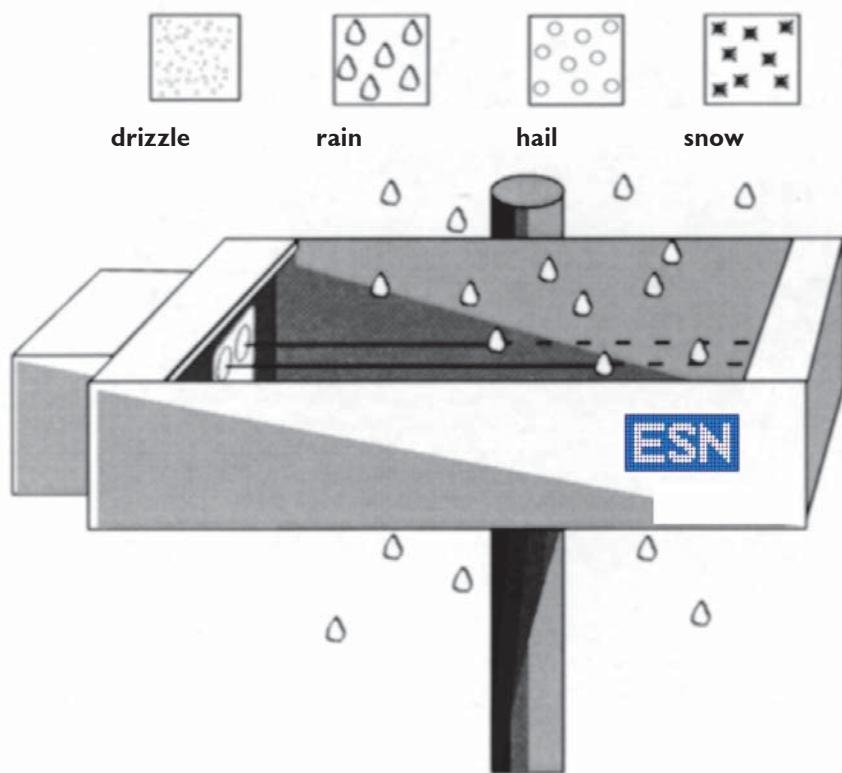
## Technical data

<b>Dimensions</b>	LxWxH 250mmx165mmx85mm
<b>Weight</b>	approx. 2 kg
<b>Sensor housing</b>	Stainless steel / aluminium
<b>Attachment</b>	Strip-type fastening with special holder (accessories)
<b>Type of protection</b>	Housing: IP 65, DIN EN 60529
<b>Ambient temperature</b>	-30°C to +60°C
<b>Supply voltage</b>	Terminal 1 (L+), terminal 2 (L-) DC min. 9V to max. 32V max. 10 W/V/A
<b>Power drawn</b>	Terminals, max. 1.5 mm <sup>2</sup>
<b>Connections</b>	2 relay output contacts NO: temperature (terminal 7,8) precipitation (terminal 9,10)
<b>outputs</b>	serial output (RS 232, 9600,8,N,1) terminal 4(TX), 5 (RX), 3 (GND) AC 250 V / 4 A cosφ > 0.7 DC 120 V / 1 A ohmic load
<b>Contact rating</b>	10 terminals
<b>Connections</b>	2 LED's in sensor display red: precipitation detection green: sensor in operation
<b>Displays</b>	4 kV <sub>eff</sub> (DC supply voltage-relay output)
<b>Test voltage</b>	1x M20 x 1.5
<b>Cable screw fitting</b>	RS485 (future);
<b>Option</b>	Strip-type fastening device type 911015,
<b>Accessories</b>	

## Ordering information

Type	Part No.
8921	140110





View without cover (PCB side)

