

BPD-06 Precipitation Detector

The **BPD-06** is used to detect falling (solid or liquid) precipitation. The device has two ways of operation: the usual 2 bit output for four different intensity levels, and a two-way serial connection, then the sensing surface's moisture is displayed digitally between levels 0 (not wet) and 100 (fully wet). The device detects the precipitation appearing on the sensing surface in capacitive mode. The capacitive probe is defended from corrosion by superficial gilding and by a green-colored layer of lacquer. The device is designed to follow the trace precipitation precisely. The sensing surface has a pre-heater and a stabilizing heater regarding dawn dew and winter season. The pre-heater can be turned on/off. In the case of having it turned on, the sensing surface is warmer than it's environment about 2-3 °C, so the device won't be perturbed by the usually appearing (dawn) dew (dew doesn't appear on warm surface). The heater stabilizes the sensing surface's temperature to be over 0 °C if the air temperature is below 7-8 °C, and melts snow with a reliable heat output even during intensive snowing.



The device has polyglot (multilingual) protocol to support Boreas' System-6 and the industry-standard MODBUS protocol simultaneously so the customer has the ability to use our latest development results with our BCU dataloggers or to implement industrial process control with MODBUS-compatible PLC.

The physical interface of the device is RS-485 compliant. The data and power lines are protected against overvoltage.

Technical Data

Measuring Range	Rain status
Resolution	0-100% surface
Accuracy	1%
Settling Time	5 % FSR
Power	10 sec.
Data Interface	8-15 V / 5mA avg., 10 mA max.
Communication	Digital RS-485
Overvoltage Protection	System-6 and MODBUS RTU protocol
Power	+/- 6,7V 600W@1msec (data lines)
	+/- 17,1V 600W@1msec (power line)
	8-15 V / 5mA avg., 10 mA max.