

ENVIRONMENT

MATLABORRE THE



## DPRECIPITATION 100

### DETECTION OF THE PRECIPITATIONS

#### GENERAL CHARACTERISTICS

DPrecipitation 100It is an optical sensor that detects the type and intensity of atmospheric precipitation. The sensor is able to discriminate between precipitation of snowy, rainy, mixed and hail nature, and to identify different classes of intensity (none, weak- (the, medium, strong).

The instrument is sensitive to events of even high intensity minimal (e.g. drizzle), reacting in a immediately in the presence of precipitation.

DPrecipitation 100It is equipped with a double receiver optical in order to ensure better sensitivity and a effective energy saving; it is able to detect the size and speed of the drops/flakes/grains of hail, and the presence of mixed precipitation.

Thanks to careful firmware development,DPrecipitation 100allows you to obtain the intensity of precipitation

tation in millimeters and millimeters/hour in case of rain, or in equivalent millimetres in case of snow or hail, to configure the detection parameters.

Automatic and intelligent management of heating internal prevents condensation and/or accumulation phenomena snow on the sensor, keeping consumption low. There is also the possibility of optimising switching on and off in order to allow power supply through a photovoltaic panel tovoltaic.

DPrecipitation 100It has an integrated memory for storing data collected in the last 30 days.



## MAIN FEATURES

- Detection and measurement of rain, snow, mixed precipitation and hail
- Instant precipitation detection
- Sensitive even to minimal rainfall
- Powered by photovoltaic panel
- Self-diagnosis



## TECHNICAL FEATURES

### TRANSDUCER

- Optical barrier generated by laser diodes
- Red light (visible)
- Dual optical receiver

### MEASUREMENTS TAKEN

- Precipitation type: rain, snow, hail, mixed
- Size and speed of drops, flakes, grains

### PRECIPITATION AMOUNT

- mm for rain
- mm equivalent for snow and hail

### PRECIPITATION INTENSITY

- mm/h for rain
- None, weak, medium, strong

### SENSOR SUPPLY VOLTAGE

- 7 V<sub>A,D</sub> ... 40 V<sub>A,D</sub>

### SENSOR CONSUMPTION

- 1W

### HEATING POWER SUPPLY

- 24V<sub>A,D</sub>

### HEATING POWER

- approx. 12 W

### OPTICAL FIELD

- 50 x 200 mm approx.

### OPERATION RANGE

- Temperature: -30... +60 °C.
- Humidity: 0...95 %, non-condensing

### HOUSING

- Anodized aluminum

### DEGREE OF PROTECTION

- IP65

### DIMENSIONS

- 678 x 421 x 296 mm (WXHXD)

### WEIGHT

- approx. 5 kg

### MEMORY

- 512 Kb (up to 30 days)

### INTERFACE

- RS485 for detected data
- Service RS232

### MORE FEATURES

- Measurement of the internal temperature of the sensor
- Configuring detection parameters
- Protection against laser beam reflections
- Intelligent management of internal heating
- Powered by photovoltaic panel
- Expandability to connect other sensors