



EMS Brno

**Data Acquisition Environment**  
Hardware – Software – Cloud application  
[www.emsbrno.cz](http://www.emsbrno.cz)

# Pulse/SDI-12 interface

## Main features:

- Converts pulse input to SDI-12
- Answers with sum of pulses since the last measuring command
- Intended for tipping bucket rain gauges with reed contact
- Watertight enclosure IP 68
- Manufactured by EMS Brno



## Specifications:

- SDI-12 ver. 1.3 compatible
- Three-wire M8 connector male
- Protective rating IP68
- Operating temperature -40 to 60 °C
- Operating air humidity 0 to 100 %



## Specification

Output	SDI-12 ver. 1.3
Input	Tipping bucket rain gauge – contact (maximal serial resistance 1 kOhm)
Data output	Sum of pulses since the last measur. command
Input connection (pulse)	Three wire M8 connector female
Output connection (SDI-12)	Three wire M8 connector male
Power supply voltage	5 to 16 V (permanent)
Current consumption	Approx. 30 $\mu$ A
Operating environment temperature	-40 to 60 °C
Operating environment humidity	0 to 100%
Protection rating	IP68
Size (diameter x length)	22 x 130 mm (incl. connectors)
Weight	40 g

### Pulse/SDI-12 interface - female connector wiring

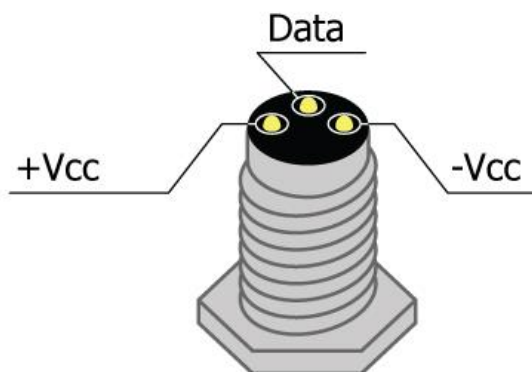


### Standard M8 male connector cable wiring



Brown - Input  
Black - Not connected  
Blue - GND

### Pulse/SDI-12 interface - male connector wiring



### Standard M8 female connector cable wiring



Brown - +Vcc  
Black - Data  
Blue - -Vcc