SO9800B
SOLAR RADIATION SENSOR

- **Intelligent microprocessor based**
- **Silicon photovoltaic cell**
- **High environmental resistance**
- **High reliability**
- **Low power consumption**
- **Calibration certificate**

The pyranometer SO9800B measures the global solar radiation (W/m^2), i.e. the energy associated with the direct and diffused radiation of the sun.

The transducer is a silicon photovoltaic cell which converts the light energy into electrical energy. A microprocessor based circuit is dedicated to transform the signal in a **RS-485** or standard **4/20 mA** output.

The connection with the data acquisition unit is done through a water-proof connector with military grade characteristics. The distance between the sensor and the data logger can be up to 1 km. The power supply is provided directly from the data acquisition unit. The sensor is factory calibrated and does not require any field re-setting:

This pyranometer provides an economical solution for use in agrometeorology.

Technical Characteristics	
Transducer	Silicon photovoltaic cell
Measuring range	0.35 ÷ 1,1 micron
Sensitivity	Approx.100 mV/Wm^{-2}
Resolution	0.1 % f.s.
Linearity	1.5 % f.s.
Overall accuracy	± 5 % f.s.
Sensing area	6.25 cm^2
Output	RS485 – 4 wires 4/20 mA - 2 wires
Power supply	RS485 from data acquisition unit 4/20 mA 7÷28 Vdc
Operating temperature	-30 ÷ 60 °C
Size	Ø180x240 mm
Weight	0,7 Kg

ORDERING GUIDE

SO9800B Output RS485
SO9700B As SO9800B with Output 4/20 mA
SO9500 As SO9800B with output voltage: 100 mV/Wm^{-2}

SIAP Bologna S.r.l. via Ca' dellOrbo 51- 40055 Villanova di Castenaso (BO) - ITALY
Tel +39 0516062411 Fax +39 0516053155
e-mail info@siap.com http://www.siap.com