



Precision barometer



Solarimeter



Soil temperature

Specification

Pressure ranges	500... 1100 hPa or 50... 1100 hPa
Operating temperature ranges	-40... +60°C (-40... +140°F)
Total accuracy	±0.15 hPa (class A)
Long-term stability	±0.1 hPa/yr (500... 1100 hPa)
Available with one, two or three barometric pressure transducers	
NIST traceable (certificate included)	

Specification

SOLAR RADIATION

Spectral range	0.4 to 1.1µm
Range	0 - 2000W/m ²
Response time	<1 second
Cosine response	Typically <10% from normal to 80° of normal
Operating temperature range	-40 to +80°C
Supply voltage	Passive device - no supply required
Output calibration	Typically 55µV/W/m ²
Supplied with individual calibration details	
Supplied with 5m of cable. Protective steel conduit optional	

Specification

SOIL TEMPERATURE

Sensor type	Semi conductor current generator
Measuring range	-40 to +60°C
Calibrated accuracy	±0.5°C (over -20 to +50°C)
Supply voltage	7 to 15V
Power consumption	Typically <1mA
Output calibration	Nominally 1.5V at 0°C and 1.8V at 50°C. Units are individually calibrated and provided with offset and multiplier values.

Supplied with 3m of cable and protective steel conduit

Other sensors include; grass minimum temperature, surface wetness, net global radiation, diffuse radiation, sunshine detector, air quality (for ppm measuring of SO₂, NO₂, CO₂ and CO), quantum radiation (PAR), soil moisture, UVA and UVB radiation and sea water temperature.

Ordering information

As the Casella CEL AWS is built to exact customer specifications, please contact the Sales Department for more information and a full quotation.

Contact Details

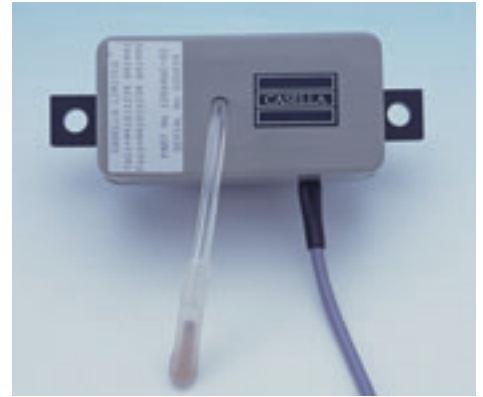
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Service	Tel: +44 (0) 1234 847799	Fax: +44 (0) 1234 841490	e-mail: info@casellameasurement.com



Temperature and relative humidity



Rainfall



Standard barometer
A small silicon transducer sensor is now available as a pcb addition to the sensus datalogger

Specification	TEMPERATURE AND RELATIVE HUMIDITY
TEMPERATURE:	
Sensor type	Platinum resistance Pt 1000 RTD
Measuring range	-10 to +60°C
Accuracy	±0.6°C (over -10 to +30°C) ±0.8°C (over full range)
HUMIDITY:	
Sensor type	Capacitive
Operating range	0 - 100%RH
Accuracy	±3%RH (over measuring range of 10 - 90%RH)
GENERAL:	
Supply voltage	7 to 28V
Power consumption	Typically 2mA @ 12V
Operating temperature range	-10 to +60°C
Output calibration	Temperature: 0 - 1V for -40 to +60°C Humidity: 0 - 1V for 0 - 100%RH 4 - 20mA output available on request, 2 wire loop, 12V lift off 28V maximum
Supplied with 2m of cable. Protective steel conduit optional	

Specification	RAINFALL
Transducer	Tipping Bucket
Aperture	400cm ² / 200cm ²
Resolution	Three models are available: 0.1mm per tip 0.2mm per tip 0.5mm per tip
Accuracy	±1% (@ 1 litre per hour)
Capacity	Unlimited
Maximum tip rate	Approx. 2 tips per second
Operating temperature range	1 to 60°C
Supply voltage	7 - 20V DC
Power consumption	Typically 2 - 3mA
Output calibration	Simple reed switch contact closure, Nil current consumption
Supplied with 9m of cable. Protective steel conduit optional	

Specification	STANDARD BAROMETER PRESSURE
Transducer	Temperature compensated silicon bridge
Range	800 to 1100mb
Operating temperature range	-10 to +60°C
Supply voltage	9 - 12V nominal (15V max.)
Power consumption	Approx. 10mA @ 12V
Output calibration	Nominally 0 to 1.6V range (800 to 1100mb). Units are individually calibrated and provided with offset and multiplier values.
Supplied with 0.8m of cable	
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