



Environmental
Measurements
Limited

7 Jupiter Court
Orion Business Park
North Shields
Tyne and Wear
NE29 7SE UK

Tel: +44-191-2583757

Fax: +44-191-2570209

e-mail: sales@emltd.net

website: www.emltd.net

SW120R RAIN SENSOR INSTRUCTION AND CALIBRATION SHEET

The SW120R works on the principle of conduction between three carbon electrodes on a flat sensing surface, the electrodes are separated by waterproof resin. Beneath the sensing surface is embedded a 100 ohm 5 watt ceramic resistor, the resistor can be used to heat the sensor preventing condensation on the probes surface. Passing a 120 mA current through the heater raises the temperature of the sensing surface 20-30 °C above the air temperature preventing dew forming on the sensing surface. the SW120R therefore detects only rain.

The sensor should be mounted at an angle of 30°-40° to enable surplus rain to run from the surface. This encourages rapid drying of the sensor when rain has stopped.

Connections :

Red	Sensor supply 8-24 vdc
Blue	Sensor supply 0 v
Green	Signal 0 v
Yellow	Signal 0 v Dry / >1.4 v Wet
Black	Heater supply 100 ohms to White
White	Heater supply 100 ohms to Black

The 5 Watt, 100 ohm heater resistor is installed between white and black. A common 12 volt supply may be used. The connections for the heater are left separate to allow trip operation if required.