AX-Weather
Weather Station

AXIO

Sun sensor
480 1000 039

POINT NORTH

POINT SOUTH

Wet & Dry Bulb
Temperature Sensor
480 1000 042

Mast mount
25-50mm dia.

Rainfall Sensor
480 1000 040

Product Overview

The AX-Weather Station is an integrated unit that accepts the signals from a number of sensors and can either/or display them in a dispaly unit or output the signals via a datalogger/output module. The unit can include wind speed, wind direction, sun hours, rain sensor, wet and dry bulb temperature and relative humidity

Features

- Integrated Weather Station
- Wind Speed and Direction Sensor
- Sun Hours Sensor
- Rain Gauge Sensor
- Wet and Dry Bulb Temperature Sensor
- Relative Humidity Sensor
- Datalogger option
- Analogue style display case
- Damped output for a stable control signal

Product Specifications

DISPLAY UNIT

Size: 687 wide x 342mm high x 70mm deep

DISPLAY PARAMETERS

Wind direction: Analogue read-out 4 cardinal points sub-divided into 5 degree increments, electronically damped.
Accuracy: ± 10 degrees, resolution > 10 degrees

Wind speed: Analogue read-out with gust indicator pointer, calibrated 0-90 mph, 0-80 knots and Beaufort scale.
Alternative kph and metres/second scales are available (see Model Numbers)
Accuracy: ± 5% or 3 knots

Barometer: Analogue read-out with set pointer reset, range 950 -1050 mBar (28 -31 inches Hg)

Temperature: LCD digital read-out in degrees F or C, max/min selectable via push buttons
Range - 40 to + 50° C (- 40 to + 120° F), resolution 0.1° C

Rainfall: LCD digital read-out in 0.01mm increments
Accuracy: ± 5% (5ml of water = 1mm rainfall), resolution 0.01mm auto-sensing

Sunshine duration: LCD digital read-out in 0.01 hour increments
Accuracy: ± 5%, resolution 0.01 hours (36 seconds)

Wet & dry bulb (Auxiliary temperature): LCD digital read-out with humidity sensor fitted with radiation screen. Relative Humidity and dew point readings are taken from chart provided.

SENSORS

Roof-mounted wind speed and direction sensor, temperature sensor, sunshine duration sensor with mounting clamps for easy installation on mast diameter 25 – 50mm. Remaining sensors wall or post mounted (see installation details with product) Data cable length: 25m standard pre-wired (additional cable lengths are available when ordering).
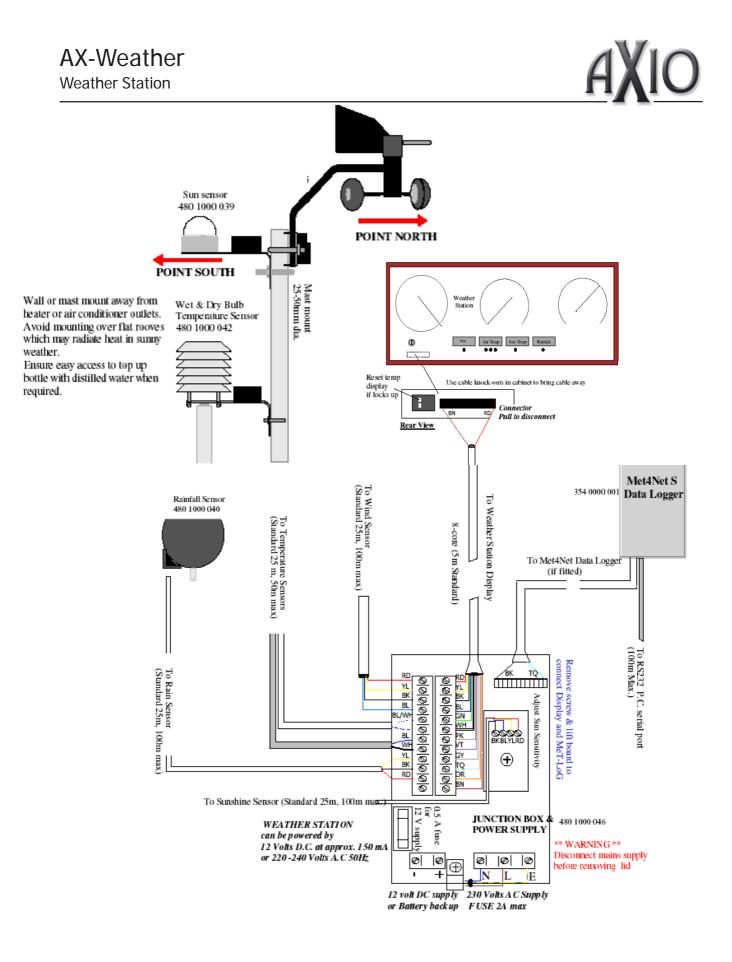
Materials: sensor assemblies utilise anodised aluminium alloy, stainless steel, nylon, injection moulded polypropylene anemometer cups.

Compass provided to align wind sensor arm to North and sunshine sensor to South.

POWER SUPPLY

220 – 240Vac 50Hz or 110Vac 60Hz moulded plug-in power supply unit. Alternative 12Vdc may be Customer supplied.

AX-Weather

Weather Station

AXIO

Sun sensor
480 1000 039

POINT NORTH

POINT SOUTH

Mast mount 25-50mm dia.

Wall or mast mount away from heater or air conditioner outlets. Avoid mounting over flat rooves which may radiate heat in sunny weather.
Ensure easy access to top up bottle with distilled water when required.

Wet & Dry Bulb Temperature Sensor
480 1000 042

Weather Station

Sun   Air Temp   Aux Temp   Rainfall

Reset temp display if locks up

Use cable knock-outs in cabinet to bring cable away

BN   RD

Connector
Pull to disconnect

Rear View

Met4Net S Data Logger

354 0000 001

Rainfall Sensor
480 1000 040

To Temperature Sensors (Standard 25 m, 50m max)

To Wind Sensor (Standard 25m, 100m max)

8-core (5m Standard)

To Weather Station Display

To Met4Net Data Logger (if fitted)

To RS232 P.C. serial port (100m Max.)

To Rain Sensor (Standard 25m, 100m max)

RD
YL
BK
BL
BL/WH
BL
WH
YL
BK
RD

RD
YL
BK
GN
WH
PK
VT
GY
TQ
OR
BN

BK   TQ

BK BL YL RD

Adjust Sun Sensitivity

Remove screw & lift board to connect Display and MeT-LoG

To Sunshine Sensor (Standard 25m, 100m max.)

WEATHER STATION
can be powered by
12 Volts D.C. at approx. 150 mA
or 220-240 Volts A.C 50Hz.

0.5 A fuse for 12 V supply

JUNCTION BOX & POWER SUPPLY   480 1000 046

** WARNING **
Disconnect mains supply before removing lid

−   +

N   L   E

12 volt DC supply or Battery backup

230 Volts A C Supply
FUSE 2A max

Unit 21, Highview, High Street, Bordon, Hampshire. GU35 0AX.
Tel: +44 (0)1420 487788   Fax: +44 (0)1420 487799
Email: sales@axio.co.uk
www.axio.co.uk

OPTIONAL EXTRAS

Gust alarm: Audible alarm set to adjustable maximum

Wind speed x 2: Facility to double recording scale (used for exposed sites)

Met4Net 'S' Data logger Part No. 354 0000 001: to PC RS232 serial port connectivity or via USB serial port adaptor cable (separately purchased from Instromet Ltd. Part No. 269 1002 001)

Software: MeT-LoG 98 bespoke software for data recording (not compatible with Windows XP) only available while stocks last.

Met4Net ™ bespoke software for data recording Part No. 356 0000 001.

Mounting Kits: Aluminium masts 36" long x 1½" diameter

Mast couplers for joining two masts i.e. 6' Part No. 480 1000 096

Wall bracket with mast clamps or Roof/slate mounted mast kit for non-chimney dwellings Part No. 480 1000 097

Autostation: Automatic Weather Station & Met4Net ™ software Part No. 355 0000 001/002/003 for 240V/110V/220V respectively.

ORDER CODES

AX-Weather	**Weather Station Display Case c/w**
480 1000 046	**Junction box & 5m cable c/w connectors to Display**
480 1000 045	**Wind speed & direction indicator & 25m cable**
480 1000 039	**Sun Sensor & 25m cable**
480 1000 042	**Wet& dry bulb temperature sensor in radiation shield & 25m cable**
480 1000 040	**Rainfall sensor & 25m cable**
Option	
354 1000 001	**Met4 Net Datalogger with RS 232 output**
480 1000 096	**Aluminium Mast Mounting Kit 3ft x 1 1/2" aluminium**
356 1000 001	**Met4 Net bespoke software for datarecording**
355 1000 001	**Automatic Weather station & Met4Net software for 240Vac**