

WHATEVER THE WEATHER...



**INSTROMET**  
WEATHER STATIONS & MONITORS



# INSTROMET WEATHER STATIONS & MONITORS

4

ATMOS N&NT  
WEATHER STATIONS



8

CLIMATICA  
WEATHER STATIONS



6

ATMOS L&LT  
WEATHER STATIONS



10

EXECUTIVE  
WEATHER STATIONS



12

STAND ALONE PRODUCTS



14

WEATHER SENSORS



The Instromet brand of weather monitoring equipment was originally founded in 1985, then known as R & D Instromet, and was based in Broadstairs, Kent. The Company remained there until the original founder sold it in order to retire from work. So then in 2004, the Company was relocated to its current Norfolk home in North Walsham and was amalgamated into the then Novomec Group. Whilst being part of the Novomec Group, the Company was purely known as Instromet Ltd. In 2010, the Novomec Group was disbanded due to a retirement sale, and then the Company became independent once more and has now become Instromet Weather Systems Ltd.

The Company all through its existence has produced weather monitoring equipment for both domestic and commercial applications. These products have ranged from actual analogue display weather stations to industrial standard wind sensors, and not least, PC based systems for data logging and web based weather monitoring applications.

With nearly thirty years of manufacturing weather monitoring equipment, Instromet's customer base is both wide and varied ranging from countless domestic users to universities, sailing clubs, golf clubs, water boards, police forces, airports, gas terminals, wind turbines and many more.

Unlike many other weather monitoring product manufacturers, we pride ourselves on listening to our customers, and will always endeavour to either source the appropriate equipment or even tailor our own to suit the needs of the individual customer. This way of thinking and versatility has seen many products listed on our website come into general release based upon what we have been asked for.

So, whatever the weather, Instromet has the monitoring system for you.



## ATMOS WEATHER STATIONS N & NT MODELS



The Atmos N and NT are deemed to be our "entry level" weather stations.

The Atmos N just purely monitors Wind Speed and Wind Direction via two attractive 10cm dials.

The Atmos NT expands on this with the inclusion of an LCD display showing outside Temperature and Time / Date. This can also then be expanded on further with the inclusion of our Rainfall sensor (available separately: 480 1000 121/01).

Both systems can be supplied with a choice of Wind Speed units from either MPH, KPH, or MPS.

Also a choice of wooden cabinet is available from those shown:



## SPECIFICATION

**Display unit size:** 310mm wide x 176mm high x 61mm deep

### DISPLAY PARAMETERS:

#### N & NT MODELS

**Wind Direction:** Analogue read-out 4 cardinal points sub-divided into 5 degree increments, electronically damped.

**Accuracy:**  $\pm 10$  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 mps scales are available.

**Accuracy:**  $\pm 5\%$  or 3 knots.

#### NT MODEL ONLY

**Temperature:** LCD digital read-out in degrees F or C, selectable via push button. Range - 40 to + 50° C (- 40 to + 120° F), resolution 0.1° C. Min / Max function available.

**Rainfall:** LCD digital read-out mm / inch selectable. (Available separately: 480 1000 121/01)

**Accuracy:**  $\pm 5\%$  (5ml of water = 1mm rainfall), resolution 0.01mm.

**Clock:** 24Hr inc on screen date.



## ATMOS WEATHER STATIONS L & LT MODELS



The Atmos L and LT are our step up from the N and NT by including an inbuilt barometer.

The Atmos L monitors Wind Speed (mechanical dial), Wind Direction (8 LED indicators), and Barometric pressure.

The Atmos LT expands on this with the inclusion of an LCD display showing outside Temperature and Time / Date. This can also then be expanded on further with the inclusion of our Rainfall sensor (available separately: 480 1000 121/01).

Both systems can be supplied with a choice of Wind Speed units from either MPH, KPH, or MPS.

Also a choice of wooden cabinet is available from those shown:



## SPECIFICATION

**Display unit size:** 310mm wide x 176mm high x 61mm deep

### DISPLAY PARAMETERS:

#### L & LT MODELS

- Wind Direction:** Analogue read-out displaying 4 cardinal points and 4 intermediate points with LED indicators.
- Accuracy:**  $\pm 10$  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 mps scales are available.
- Accuracy:**  $\pm 5\%$  or 3 knots.
- Barometer:** Analogue read-out with set pointer reset, range 950 -1050 mbar (28 -31 inches Hg).

#### LT MODEL ONLY

- Temperature:** LCD digital read-out in degrees F or C, selectable via push button. Range - 40 to + 50° C (- 40 to + 120° F), resolution 0.1° C. Min / Max function available.
- Rainfall:** LCD digital read-out mm / inch selectable. (Available separately: 480 1000 121/01)
- Accuracy:**  $\pm 5\%$  (5ml of water = 1mm rainfall), resolution 0.01mm.
- Clock:** 24Hr inc on screen date.

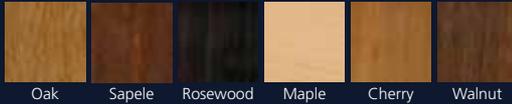
The Instromet Climatica weather station is Instromet's most versatile/customisable weather station to date. Due to the "Multi Weather Display" within the weather station and its auto sensor detection technology, the weather station has the ability to display any of the sensors currently within the Instromet range.

It's not just the sensor options which are open to customisation, the wind speed units, and display cabinet types can also be specified to suit the operators tastes/specifications.

**Wind Speed units:**

MPH MPS KPH

**Cabinet variations:**



Along with the actual weather station itself, the system comes with a sensor box which all the sensors are connected to. This sensor box also houses the systems PC interface/datalogger when purchased separately. (480 1000 148).



# CLIMATICA WEATHER STATION



## SPECIFICATION

**Display unit size:** 178mm high,  
390mm wide,  
& 68mm deep

### DISPLAY PARAMETERS *(standard supply):*

**Wind Direction:** Analogue read-out 4 cardinal points sub-divided into 5 degree increments, electronically damped.

**Accuracy:**  $\pm 10$  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

**Accuracy:**  $\pm 5\%$  or 3 knots

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

**Temperature:** digital read-out in degrees F or C. Range - 40 to + 50° C (- 40 to + 120° F), resolution 0.1° C

**Clock:** 24hr time with day/month/year date

The Instromet Executive weather station is Instromet's Flagship weather station. Like the Climatica, the Executive is versatile and customisable. Due to the "Multi Weather Display" within the weather station and its auto sensor detection technology, the weather station has the ability to display any of the sensors currently within the Instromet range.

It's not just the sensor options which are open to customisation; the wind speed units can also be specified to suit the operator's tastes/specifications.

**Wind Speed units:**

MPH MPS KPH

Along with the actual weather station itself, the system comes with a sensor box which all the sensors are connected to. This sensor box also houses the systems PC interface/datalogger when purchased separately. (480 1000 148).



**EXECUTIVE  
WEATHER STATION**



## SPECIFICATION

**Display unit size:** 342mm high,  
686mm wide,  
& 70mm deep

### DISPLAY PARAMETERS *(standard supply):*

**Wind Direction:** Analogue read-out 4 cardinal points  
sub-divided into 5 degree increments,  
electronically damped.

**Accuracy:**  $\pm 10$  degrees, resolution  $> 10$   
degrees

**Wind Speed:** Analogue read-out with gust  
indicator pointer, calibrated  
0-90mph, 0-80 knots and Beaufort  
scale. Alternative kph and metres/  
second scales are available

**Accuracy:**  $\pm 5\%$  or 3 knots

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

**Temperature:** digital read-out in degrees F or C  
Range - 40 to + 50° C (- 40 to +  
120° F), resolution 0.1° C

**Clock:** 24hr time with day/month/year date

## SUN DURATION SENSOR

The Instromet Stand Alone Sun Duration sensor, is a versatile device available in many different configurations. As standard the system comprises of an outdoor sensor, indoor control box, counter display and all necessary cables and power supplies.

It can however, be tailored to suit the operators requirements, with the addition of a datalogger or by leaving out the counter display if connected to peripheral counting equipment (such as with the "Davis" interface). It can also be supplied with IR filtered diodes within the sensor which give even greater accuracy as they only accept light transmission extremely close to the WMO standard for sun duration measurement (330 to 720nm making it extremely close to the WMO standard of 400 to 700nm.)

Contact Instromet directly for a tailored system or to discuss options further.

### Part Numbers:

- 358 6000 005 - Standard Sun sensor with display
- 358 6000 006 - Standard Sun sensor No display
- 358 6000 007 - IR filtered Sun sensor with display
- 358 6000 008 - IR filtered Sun sensor No display

"Over the past decade or so this simple, reliable, consistent and reasonably-priced sensor has become the sunshine sensor of choice for most of the amateur and hobbyist weather observing community within the UK and Ireland."

*From The Weather Observer's Handbook by Stephen Burt (Cambridge University Press, 2012 Handbook Details..., reproduced by permission of the author and Cambridge University Press. See also [www.measuringtheweather.com](http://www.measuringtheweather.com)*



## RAINFALL SENSOR

The Instromet stand alone rainfall sensor comes complete with outdoor sensor, indoor junction box, twin display counter and all cables and power supplies required for a fully functioning product.

The sensor detects rainfall by means of an Infra-red beam. Each time a droplet of water passes through the beam at the base of the funnel, a pulse is generated which the displays count, with each droplet being the equivalent to 0.01mm of rainfall.

This counting method allows the sensor to be extremely accurate and of course self emptying but does require cleaning maintenance to the funnel filters periodically.

**Part Number:**  
357 2000 002



## TEMPERATURE SENSOR

The Instromet stand alone Temperature sensor comes complete with outdoor sensor with 25m of cable and an indoor display.

The display has the ability to display both inside and outdoor temperatures. It is C and F Switchable. Has a built in Alarm function for the outdoor temperature. Shows Min/Max temperatures for both displays. The display runs from a single AAA battery.

**Part Number:**  
480 1000 142





## HUMIDITY SENSOR

Although not supplied with an Instromet weather station as standard, this Humidity sensor can be used with the Climatica and Executive weather stations.

It incorporates an extremely accurate Vaisala Humidity probe, and comes supplied with 25m of cable as standard.

**Part Number:**

480 1000 041/01 – Humidity Sensor

## RAIN SENSOR

Rainfall sensor for use with Instromet weather stations.

The sensor detects rainfall by means of an Infra-red beam. Each time a droplet of water passes through the beam at the base of the funnel, a pulse is generated which the displays etc count, with each droplet being the equivalent to 0.01mm of rainfall.

This counting method allows the sensor to be self emptying but does require cleaning maintenance to the funnel filters periodically.

The rain sensor comes pre-wired with 25m of cable.

**Part Numbers:**

480 1000 121/01 – Rain sensor

Extra filters and 2" pole mount kit are also available separately.



## SUN DURATION SENSOR

Sun duration sensor for use with the Climatica, EWS weather stations, and stand alone sensor.

Two variations are available, standard and IR Filtered. The IR Filtered unit only accepts sun light within band of 330 and 720nm making it extremely close to the WMO standard of 400 to 700nm.

The sensor comes complete with 25m of cable as standard.

**Part Numbers:**

480 1000 151/01 – Sun sensor

480 1000 158/01 – IR Filtered sun sensor





## WIND SENSOR

Replacement wind sensors available with and without temperature probe. For use with all Instromet ranges of weather stations.

The non-temperature wind sensor is supplied with 25m of four core cable and the temperature wind sensor is supplied with 25m of six core cable. Both wind sensors come with a compass for alignment purposes and mounting instructions.

The "Basic" wind sensor incorporates a sintered bronze bearing in the base of the cup assy and the "Pro" wind sensor uses a ball bearing.

### Part Numbers:

480 1000 044/01

Pro wind sensor – no temperature

480 1000 052/01

Basic wind sensor – no temperature

480 1000 100/01

Pro wind sensor with temperature

480 1000 045/01

Basic wind sensor with temperature

## WET & DRY BULB SENSOR

Wet and Dry Bulb for use with the Climatica Plus and EWS weather stations. Used for measuring Dew point. The Climatica and Executive weather stations perform the calculation internal for display on screen. The sensor is supplied with 2 x 25m of two core cable.

### Part Number:

480 1000 042/01 – Wet and Dry Bulb



## TEMPERATURE SENSOR

This screened temperature sensor can be used with any weather station in the range, either as the main temperature sensor in place of a wind sensor version or as the aux sensor on the Climatic and Executive weather stations.

### Part Number:

480 1000 063/01 – Temperature sensor

### MAST KITS:

Aluminium mast kit 1m long x 1½" dia.

*Part No. 480 1000 094*

Aluminium mast kit 2m long x 1½" dia.

*Part No. 480 1000 096*



**Instromet Weather Systems Ltd**

10B Folgate Road, Lyngate Industrial Estate,  
North Walsham, Norfolk NR28 0AJ

Telephone: +44 (0)1692 502800

Fax: +44 (0)1692 502801

Email: [sales@instromet.co.uk](mailto:sales@instromet.co.uk)

[www.instromet.co.uk](http://www.instromet.co.uk)

**Disclaimer**

Instromet® products are designed to monitor current and previous weather conditions for domestic use and should not be considered as predictive weather forecasting equipment. Contact your regional Met Office centre if you need weather forecasting data ([www.metoffice.gov.uk](http://www.metoffice.gov.uk)). Our products are tested in-house for operation and functionality but have not been independently tested by a UKAS accredited laboratory. As part of our ongoing policy to improve the design and specification of our products, we reserve the right to change any detail given without prior notice. Instromet Weather Systems Ltd shall not be responsible for any liability or loss of any nature which may result from the use of any information provided in technical literature.