



Instromet Weather Systems Ltd



MetPlus Installation Guide

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## Introduction.

Welcome to your new MetPlus weather station. This product handbook only covers the installation and use of the standard supplied system. Details regarding the installation of extra sensors can be found either via the web site ([www.instromet.co.uk](http://www.instromet.co.uk)) or with the enclosed leaflet with each sensor.

## System Contents:

Upon opening, the below items should be present:

- 1) MetPlus control Box
- 2) Wind / Temp Sensor with 25m of cable ( 480 1000 045/01 )
- 3) Plug in power supply
- 4) Compass
- 5) Met4Net windows PC software (Metplus version 35500 only)
- 6) Protocol list (Metplus version 35505 only)
- 7) 5m RS232 Cable

The below are optional extras for system expansion:

- |                             |                     |
|-----------------------------|---------------------|
| 1) Wet and Dry Sensor       | ( 480 1000 042/01 ) |
| 2) Humidity Sensor          | ( 480 1000 041/01 ) |
| 3) Rainfall sensor          | ( 480 1000 121/01 ) |
| 4) Sunshine sensor          | ( 480 1000 039/02 ) |
| 5) Temperature sensor       | ( 480 1000 063/01 ) |
| 7) Electronic Barometer PCB | ( 480 1000 036/02 ) |
| 8) Battery back up module   | ( 480 1000 147 )    |
| 9) 2m mast kit              | ( 480 1000 096 )    |
| 10) 1m mast kit             | ( 480 1000 094 )    |

The above options are available separately from Instromet sales:  
e-mail: [sales@instromet.co.uk](mailto:sales@instromet.co.uk) Tel: ++ 44 (0)1692 502800

## Installation instructions:

Before getting started a small flat bladed screw driver will be required for adjusting the various screw terminal connections.

Upon receipt the sensor and data-logger PCB will be packaged within anti static bags, and these will need to be removed. The PCBs can then be slotted into the box and the two way plug on the trailing wire from the PSU socket will need to be connected to **CON4** on the sensor PCB.

The Diagram on the following page shows details for attaching the sensors to the sensor box PCB. Each sensor is supplied with 25m of cable as standard and each core of the cable is colour coded to match the sensor PCB and the sensor itself. This being the case each connection made needs to be matched colour to colour at both ends of the cable, this ensures a simple to follow installation which can be done by anyone.

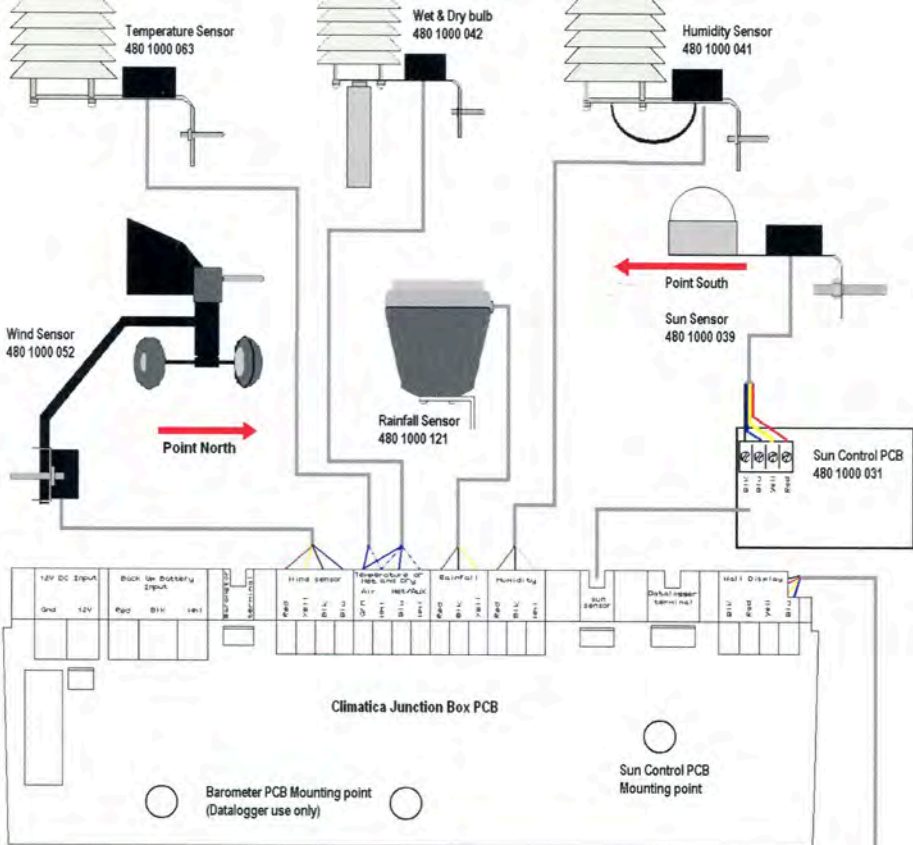
The diagram shows the basic wind sensor being utilized with a four core cable. But the standard supply of wind sensor with the MetPlus is our temperature version with a six core cable. The extra "green" and "white" wires for the temperature need to be connected into the "Air" Temp connections.

The wind sensor should ideally be mounted on a 25-50mm diameter pole and as high as possible and away from any thing which could obstruct the "flow" of wind hitting the cups or anything which could cause wind turbulence as this to could lead to incorrect readings. Other wise the only other setup for the wind sensor is to ensure its pointing "North" using the compass provided.

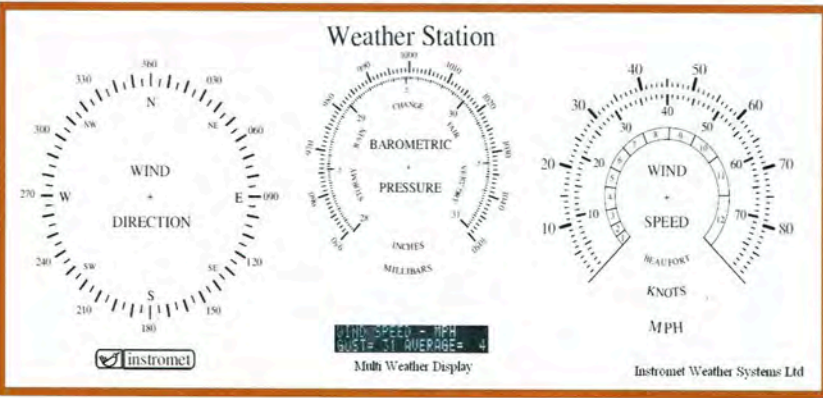
For the installation of "extra" sensors, please see separate installation documents enclosed with each sensor.

Once the sensors are connected to the sensor PCB, the datalogger PCB can then also be connected to the sensor PCB via its four way connector to the panel mounted header labelled - "Datalogger Terminal"

Finally connect the supplied RS232 cable to the Datalogger PCB via the colour coded terminals marked "RS232 connect" in readiness to connection to the PC for data monitoring and data collection etc



**Instrument Climatica Wall Display**



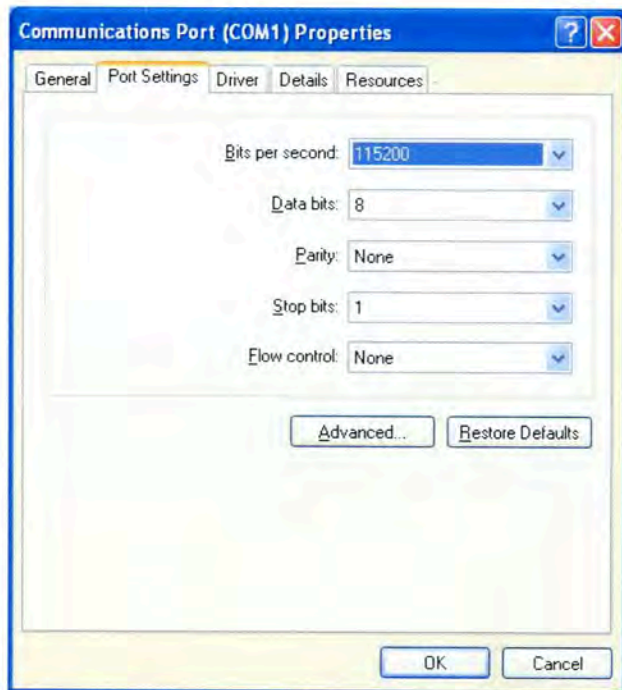
Climatica Display sold separately



## Operating Instructions:

Once the sensors and datalogger PCB have all been connected to the sensor PCB, ensure the RS232 connection is then attached to the PC com port before powering the system up.

Once connected to the PC ensure that the com settings are as below to ensure correct communication with the MetPlus hardware:



If these are correct, proceed to power the MetPlus box up. All being well the Tri-colour LED on the datalogger PCB should activate and then start to “blink” every 5 seconds to indicate that logging has commenced.

Once logging has commenced, then refer to either the Met4Net handbook or the protocol list for retrieving the stored data or for accessing the real time data. Etc

If using the Protocol list ensure the first action performed is to set the internal clock within the datalogger to ensure the correct Time/Date stamp is in place for each record.

## Trouble shooting guide:

Despite careful consideration when installing the system, if a feature does not operate as expected then please consult the notes below:

Datalogger Tri-colour LED not illuminating:

Check to power connections.

Ensure the Datalogger PCB is connected to the Sensor PCB correctly via the four way connector.

Datalogger LED blinking but unable to communicate with the PC.

Check the RS232 cable wiring configuration is correct.

Check the PC's COM port settings are correct.

If all else fails call the service department on ++44 (0)1692 502800 or return the system to us for testing or replacement.

### 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.

## Notes:

Enter the system Serial number here for future reference:

Enter the code here shown on the back of the display below the serial number:

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