








The Helios Range

An accurate, low cost mini weather station

HeliosMini

-  **Automatic measurement of up to four weather parameters**
-  **Choose from:**
 - Air Temperature**
 - Air Humidity**
 - Grass or Ground Temperature**
 - Rainfall**
 - Surface Wetness (Dew)**
-  **Compact, low cost system**
-  **All parts fully weatherproof**
-  **Connects to a PC for storage and archive of weather records**
-  **Supplied with easy to use software**
-  **Data opens in Excel to draw graphs, tables etc.**



Skye Instruments are well known for the manufacture of high quality automatic weather stations. The Helios Mini is a low cost addition to the range making such automatic measurements available to all.

The Helios Mini system combines accurate, meteorological specification sensors with well proven datalogging instrumentation in one compact, weatherproof housing. The 'Stevenson' type radiation screen is also integral to the same housing, making it a fully stand alone system.

Choose up to 4 sensors from Air Temperature, Relative Humidity, Grass or ground Temperature, a self emptying raingauge or a surface wetness (dew) sensor.

Helios Mini can be programmed to record the weather parameters throughout the day, for example every half hour or hour, not just once or twice a day as is usual with manual stations. This allows the recording of the actual time at which the maximum / minimum temperatures or rainfall occurred.

The datalogger is battery powered as standard, with solar power or mains power options. The data can be collected using a laptop if installed in a remote site, or by a permanent cable link to the office PC if convenient.

Free Skye software is included which allows numerical (ASCII) files to be downloaded to the PC. These files open directly into Excel for printing graphs, tables etc.



SPECIFICATIONS

Housing	Mounting	Memory	Logging Intervals	Communications	Data	Power
Grey ABS - Sealed to IP65. Includes solar radiation screen	Bracket provided for mast, boom or wall mounting	5000 datapoints (e.g. 14.8 weeks logging at 30 minute intervals) 1 datapoint contains date, time plus a reading from each sensor	1, 5, 10, 15, 20, 30, 60, 120 minutes (default setting 30 minutes)	RS232 - will communicate with any PC. Windows software provided free of charge with each logger. Fast offload to save power. Logging interval setup and battery check at the click of a mouse	Offloaded files are available as standard ASCII format that can be used with most analysis software, 'Excel', etc.	Internal battery life typically up to 6 months with Lithium battery. Standard alkaline battery will provide power up to 10-12 weeks. Optional external power via solar power, 12 volt battery or mains.
Clock	Inputs	Air Temperature	Relative Humidity	Rainfall	Surface Wetness (Dew)	Grass / Ground Temperature
Real time year, month, date time clock enabling automatic synchronisation of several units. Clock backed by separate lithium battery - no need to re-set when changing main batteries	Maximum of four - choose between air temperature, relative humidity, rainfall, grass or ground temperature and surface wetness (dew)	Range -55 to +90°C. Resolution 0.06°C. Typical Accuracy better than 0.2°C over -10 to +85°C. Maximum Error 0.5°C. Housed in solar radiation shield	Proven, reliable capacitive system. True range 0-100%. Accuracy $\pm 2\%$ over the whole range 0-100% RH. Resolution 0.025%. Rapid recovery from condensation. Replaceable or recalibrateable module housed in the radiation screen	Tipping bucket raingauge (0.25mm rain event). Interrupt driven.	Wetness indication as a continuous scale between dry and wet. User selectable sensitivity.	Range -55 to +90°C. Resolution 0.06°C. Typical Accuracy better than 0.2°C over -10 to +85°C. Maximum Error 0.5°C. Located at the tip of a 3m cable attached to datalogger

ORDERING INFORMATION

The Helios Range

SHL 3000	HeliosMini datalogger with RH & Air Temperature sensors, radiation screen and pole mount
SHL 3001	HeliosMini datalogger with RH, Air Temperature and Leaf Wetness sensors, radiation screen and pole mount
SHL 3002	HeliosMini datalogger with RH, Air Temperature and Leaf Wetness sensors and a Raingauge, radiation screen and pole mount
SHL 3003	HeliosMini datalogger with RH, Air Temperature, and Soil Temperature sensors and a Raingauge, radiation screen and pole mount
ACC/11A-1	1 metre mast - pole only

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