Skye™

An Employee Owned Company

MiniMet
Weather Station

APPLICATIONS

The MiniMet Automa

- a system with the DataH
- modular and versatile - cho
- systems can be mounted
- stand-alone systems, or i
- a wide range of mountin
- Skye welcomes opp individual installati

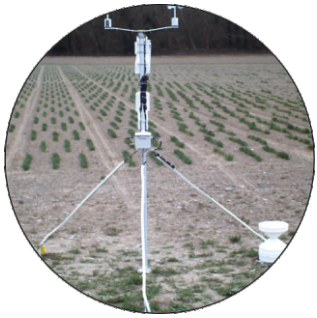
Commercial Growers

Crop Research

Agronomy

Remote Sensing

Climate Change



Soil Science

Agricu

atic Weather Station

Hog datalogger at its heart
ose only the sensors you need
on towers, masts and walls.
nstall with other equipment.
g accessories are available
portunities to work on
ons and applications.

Quarries

Horticulture

Landfill Sites

Animal Behaviour

Urban Studies

ulture

Dust & Odour Control

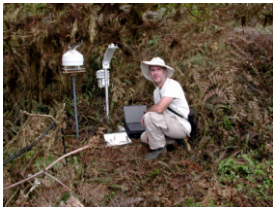
APPLICATIONS

CASE STUDIES

Unilever/Birds Eye Pea Harvest, UK

A grower in Hull (UK) has been successfully using the Skye MiniMet weather station to aid them in the production and harvesting of peas. The operation, which is the largest of its kind in the world, co-ordinates a sowing and harvesting operation of vining peas across 9,600 hectares of East Yorkshire and North Lincolnshire. The aim is to produce best quality Garden Peas and Petits Pois for the Birds Eye Brand

Charles Darwin Research Station, Galapagos Islands



A Skye MiniMet system is currently in use at the Charles Darwin Research Station facilities in the Galapagos, Ecuador. One of the Station's principal projects is to develop methods of control and removal of invasive species including plants, insects, and vertebrates.

Guildhall - Meteorological Station Monitoring

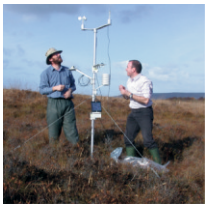
The Swansea City and County Council in Wales has an established programme of automatic and continuous air quality monitoring dating back to 1994. In 1995 they added a Skye MiniMet weather station.
Data from 5 air quality stations around Swansea can be viewed as an online resource of near real-time air quality data and meteorological data, not only for Swansea residents but also for students and medical health professionals alike.

Lower Kihansi HydroPower Project

The environmental monitoring of the Lower Kihansi Hydropower project in the Udzungwa Mountains, Tanzania, brought together a team of international scientists to examine the impact that the project would have upon the ecosystem of the Kihansi Gorge.

The complete Case Studies, togethe
the Skye website www

Cors Fochino is Key to Climate Change



Cors Fochno, a raised peatbog near Borth, Wales is an important site for climate change research in the UK. The project, which uses a MiniMet weather station was featured in a BBC documentary "Climate Change - Britain Under Threat" presented by Sir David Attenborough, Matt Allwright and Kate Humble.

Forest Climate Measurements in South Korea

A research project with the following goals:

- the long-term monitoring of forest ecology through the analysis of meteorological phenomena in the forest.
- Analysis of growth and vigour on tree and forest stands, by microclimate analysis
- Long-term change in climate monitoring which leads a mountain style climate data analysis
- Analysis on climate change in mountain areas by understanding climatic differences using climate factors in mountain and non mountainous areas

Solar Radiation Monitoring in Moldova

The Atmospheric Research Group is based in Moldova. It has a ground based solar radiation monitoring station. The station is placed in an urban environment of Kishinev City and is installed on the roof of a building. The ground station consists of 9 sensors of radiation for continuous measurements of global, diffused and direct solar radiation and automatic sun-tracking.
To supplement data from the sensors the group uses a Skye MiniMet weather station to measure the main meteorological parameters

er with many more, are available on
v.skyeinstruments.com

CASE STUDIES

A Typical Minim

et Configuration

COMMUNICATIONS

Communicating with your MiniMet

Communicating with and offloading your data from the Skye MiniMet couldn't be easier:

Laptop PC

The data cable which is supplied as part of the system is connected between the RS232 socket of the DataHog and the USB port of the laptop. Run SkyeLynxComms on your laptop (also supplied as part of the system) and offload your data.

Mobile Phone*

Connect the supplied data cable to a USB adapter which suits the phone, install the 'terminal app' on the phone and offload your data to your phone. The file can then be emailed, uploaded to Dropbox, etc or transferred to a PC

* certain models

Tablet*

Connect the supplied data cable to a USB adapter which suits the tablet, install the 'terminal app' and offload the data to your tablet. The file can then be emailed, uploaded to Dropbox, etc or transferred to a PC

* certain models

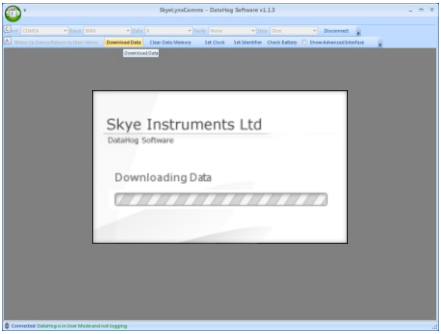
Removable Multi-Media Card

DataHog2+ incorporates a multi-media storage device. This device can be removed and a new one inserted when the data is required. Most laptops and desktop PCs now have readers for these devices.

GPRS Link

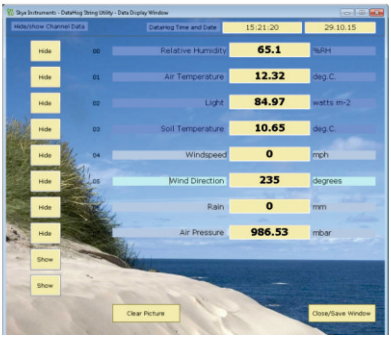
Data is transmitted from the datalogger via the GPRS Link over the GPRS mobile phone network to a public ftp server. The server can be accessed via any internet browser and the data downloaded.

Using & Viewing your Data



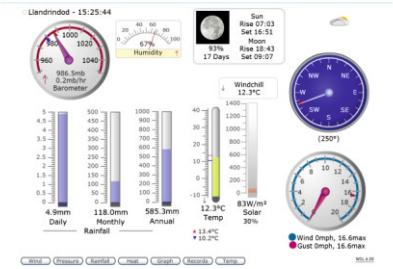
SkyeLynxComms

PC software which communicates with the DataHog for changing the configuration and offloading data. Supplied as part of the system



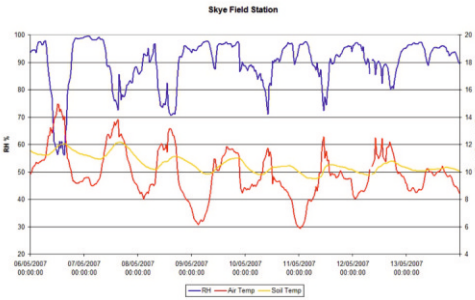
DHSU

A 'Live Display' option for systems which are permanently connected to a PC, even if the cable length is kilometres! The DataHog sends a datastring at the logging interval. This is picked up by the software and displays the current weather on the PC screen.



WDL

Weather Display Live. An option for GPRS systems. The DataPlus Service offers 'Live Display' of the weather from a MiniMet via the website www.minimet.co.uk and a customer login.



DIY

The offloaded file from the DataHog is a text file. This can be imported into any spreadsheet or data handling programmes which accept this file type. Data can then be manipulated to suit the application.

COMMUNICATIONS

SPECIFICATIONS

Overview of

DataHog Datalogger

Operating Range:	-20 to +70ºC
Channels:	choose from 16 current, 16 voltage or 6 digital hardware channels. Maximum 25 software channels
Range & Sensitivity:	current nA to µA - ideal for best ranging of narrowband light sensors voltage µvolts to volts
Data Storage:	onboard battery backed RAM capacity for up to 27,000 recordings. Removable SD Storage of up to 32GB
Resolution:	15 bits A/D converter
Sample & Log Times:	10 seconds up to 12 hour intervals. Channels can be individually configured
Housing:	ABS enclosure sealed to IP65
Clock:	real time clock.
Communications:	RS232/USB
Power supply:	internal 9 volt batteries. External 12 volt battery for SD storage option
Battery Life:	internal batteries 3-6 months depending on sensors and logging interval. Solar or mains power recommended for fixed long term installations
Optional Power supplies:	solar and mains. Size of solar panel dependant on sensor type, storage option and location in the world.
Data format:	offloaded data is a text file ready for importing into commercial spreadsheet or data handling programmes

the Specifications

SPECIFICATIONS

Sensors
(not exhaustive)

Relative Humidity

Air Temperature

Wind Speed

Wind Direction

Raingauge

Light
a full range from UV, PAR models and
solar radiation to multi-channel, narrowband options
for special projects

Air Pressure

Soil Temperature

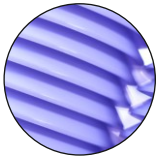
Soil Moisture

Leaf/Surface Wetness

All sensors are either designed and manufactured by Skye to a high specification, or selected from other manufacturers with good reputations

Accessories

A full range of mounting accessories are available to choose from. Alternatively, we offer a bespoke service for your application.



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