



Features

Memory Size : 16k (Non-volatile)
No. of Readings : 7900 per channel
Resolution : 8 bit
Delayed Start : Relative / Actual
up to 45 days
Stop Options : When Full
After n Readings
Never (Wrap around)
Reading Types : Actual, Min, Max.
Logging Interval : 1 sec to 10 days
Offload : While stopped or
when logging in
minute multiples
Alarms : Two, fully
Programmable
Functional Range : -20°C to +85°C /
-4°F to +185°F
IP Rating : IP53 splashproof
Battery Life : Up to 4 years

Notes:

Battery replacement is recommended every 2 years. It may be replaced with Saft 3.7V 1/2AA Lithium cells. Stop the unit logging before replacing the battery.

Functional Range describes the limits to which the datalogger may be subjected, **not** the range over which it will record.

Sensor Details

CHANNEL 1: Temperature Range H

Range : -30°C to +50°C /
-22°F to +122°F

Sensor Type : 10k NTC Thermistor
(Encapsulated)

Sensor location : Internally mounted
Response Time : 3 min to 90% Apprx.

Sensor accuracy : $\pm 0.2^\circ\text{C}$ / $\pm 0.36^\circ\text{F}$
From 0°C to 50°C /
32°F to 122°F

Resolution : 0.25°C at 0°C /
0.45°F at 32°F

CHANNEL 2: Relative Humidity

Range : 0 to 95% RH

Sensor Type : Capacitive

Sensor Accuracy : $\pm 3\%$ at 25°C / 77°F

Sensor Location : In base of unit

Temp. Dependency : Low

Response Time : 10 sec to 90%

(Non-condensing)
Resolution : Better than 0.5%RH

Mechanical Data

Case Style : IP53 Plastic shell

Case Dimensions

Height : 72mm / 2.83
Width : 60mm / 2.36
Depth : 33mm / 1.3
Weight : 50g / 1.8 oz.

Special Notes

When using the units at low temperatures, condensation may form. Before opening the case, allow the units to reach room temperature. The IP53 rating is only valid when the rubber connector cap is fitted and the unit is oriented with the hanging tab uppermost.

The RH sensor has excellent long-term performance and can be wetted without damage, however the accuracy will be temporarily impaired and it should be allowed up to 30 minutes to recover. It can be cleaned in de-ionised water or pure isopropanol, but **not abrasive detergents**. The sensor will resist small amounts of the following chemicals: Formaldehyde, Ammonia, Carbon Monoxide, Sulfur Dioxide, Ethylene Oxide, Hydrogen Chloride, Hydrogen Fluoride, Hydrogen Peroxide, Nitrogen Dioxide, Methyl Chloride, Chlorine, Freon, Methanol, Ethanol, Isopropanol and ozone. It also offers resistance to ultraviolet rays. Surface scratches or residue will compromise the accuracy. Salt solutions may also cause permanent damage as crystals forming within the porous layers affect moisture levels there.

Approvals

This equipment complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause any harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product is manufactured within the Orion Group to ISO EN 9002 part 2 (Certificate No. 6134), and is CE approved to EN50081 part 1:1992 and EN50082 part 1 and 2:1992/95 with any standard leads or probes supplied.



NAMAS traceable calibration certificates are available on individual units.

Interface Information and Related Products

To use your Tiny Data Logger you will require:

Tinytag interface cable (CAB-0007), PC with GLM for Windows™ (SW-0009) or Easyview for Windows 95™ (SW-0500); or Psion handheld computer, with Tinylink version 3.0 or above (SW-1101) and suitable cable (See Tinylink Data Sheet).

Further Related Products:

SER-9520 Tinytag Ultra Service Kit including battery and seal
DWG-ULTRA Drawing with detailed dimensions of Tinytag Ultra casing

Applications

Heating and Ventilation Greenhouse monitoring Horticulture Museums and archives.