SatelLite-TH

Combined temperature and humidity logger

Description

SatelLite is a compact two channel datalogger with a built-in sensor for temperature and humidity. SatelLite-TH is characterised by high accuracy and a wide measuring range.

A combined temperature and humidity sensor from VAISALA is used. The new INTERCAP® sensor is exchangeable without calibration for easy use and low maintenance costs.

SatelLite-TH is enclosed in a sturdy aluminium casing and powered by a common 1.5 V battery. This ensures good economy and simple handling. The built in sensor is powered from the internal 1,5V battery.

SatelLite-TH is meant for accurate measurements of clime in processes in dwellings, halls, storage rooms, cold storage rooms, transports, etc. in conjunction with research, general investigations, operation and maintenance.

SatelLite is manufactured in Sweden by Mitec Instrument.

Features

- Combined temperature and humidity logger

- Easy to use

- Sturdy design

- Powered by a standard 1.5V battery

- Exchangeable humidity sensor

- Large memory

- All Mitec analysis programs can be used

- Swedish made

Function

The built-in electronics is powered by a single standard 1.5 V battery. This reduces the battery cost to 1/10 compared to the special 3V Lithium batteries that normally are used in portable applications. The power consumption is low and a battery can last up to 1/2 year depending on how the measurement is done.

SatelLite-TH measures temperature in the range -20°C to 50°C (-4°F to 122°F) and humidity in the 10 - 90 % range . The resolution is always better than 0.1°C and 0.1 %RH.

Mitec analysis programs will automatically mark the data with instrument ID for full traceability according to the requirements in ISO 9000.

SatelLite-TH has a built in non-volatile data memory, which means that it will not lose its information if the battery runs out. The memory size is 20,000 measured values (10 000 for each sensor).

SatelLite is part of the Mitec system for professional data acquisition. Measuring data can be analysed using Mitec WinSat software or Mitec's standard programs WinLog or Monitor. WinLog and Monitor can also be used with other Mitec data loggers.

SatelLite-TH data logger

Technical Data Sat-TH

GENERAL

Number of measuring channels	2
Memory size	32k byte.
Number of measured values	10 000 for each channel. Total 20,000.
Clock	Crystal controlled, date and time.
Registration interval	0.25, 0.5, 1.2, 5, 10, 15 or 30 s. 1, 2, 5, 10, 15 or 30 min. 1, 2, 4, 6, 8,12 or 24 h
Measuring frequency	Optional for each registration interval
Power Supply	1.5V battery LR6 (alcali)
Battery life span	1 month to 1/2 year. (Depending on registration interval, measuring time and ambient temperature)
Ambient temperature	-20°C to +50°C (humidity sensor -10 to +60°C). Non condensing.
EU standard	EN50081-1, EN50081-2, EN50082-1

INPUTS

Types	Temperature and humidity.
Input selection	Automatic detection.
Resolution	12 bits
Linearising	Automatic
Temperature, SatelLite-TH	
Sensor	Exchangeable thermistor
Measuring range	-40°C to 80°C (instrument max 70°C)
Resolution	0.03°C to 0.1°C
Total inaccuracy with sensor	Max error: ±0.3°C @ -20 to 70°C ±0.4°C @ 70°C to 80°C and -40°C to -20°C
Sensor time constant	5-30 s to 90% depending on the air velocity.
Humidity, SatelLite-TH	
Sensor	Vaisala INTERCAP® exchangeable without recalibration
Measuring range	10 to 90 % RH
Resolution	< 0,1 % RH
Total inaccuracy with sensor	+- 3% @ 10 to 90 % RH
Long time stability	+- 5% over two years

FUNCTIONS

Start and stop conditions	Adjustable, time and manual start. Time, manual and memory full stop
Storage method	Mean value, adjustable number of measurements per registration.
Reading and setting	Via PC and one of the Mitec programs WinSat, WinLog or Monitor.

COMMUNICATION

Computer	RS232, 9600 baud. Control signal from the computer.
Indication	LED. One flash every 4:th second while logging is in progress.

MECHANICS

Contact device	4 pole modular contact 4/4
Box	Aluminium 60 x 50 x 30 mm / 2.36 x 2 x 1.2 in.
Sensor	Diameter 12mm, length 40 mm
Weight	120 g / 0.27 lb. including battery.

Ordering information

Article number:	Sat-TH/32, 20,000 measured values
The delivery includes:	Datalogger SatelLite-T including alkaline battery Manual in English
Accessories:	Analysis program WinSat, WinLog or Mitec Monitor PC-cable LPC-7 for PC Calibration standards CSL-X (6 - 90 % RH)