

Satellite-T

One-channel temperature logger

Description

Satellite is a compact one channel datalogger with a built-in temperature sensor. Satellite is characterized by high accuracy and a wide measuring range.

Satellite is enclosed in a sturdy aluminium casing and powered by a common 1.5 V battery. This ensures good economy and simple handling.

The collected information can be presented by any one of Mitec's Windows programs WinSat, WinLog or Monitor.

Satellite is meant for accurate measurements of temperature processes in dwellings, halls, storage rooms, cold storage rooms, deep freezer showcases, transports, etc. in conjunction with research, general investigations, operation and maintenance.

Satellite is manufactured in Sweden by Mitec.

Features

- Sturdy design
- Powered by a common 1.5V battery
- Large memory
- Wide measuring range from -40 °C to 80 °C
- High accuracy and resolution
- All Mitec analysis programs can be used
- Removable sensor for external measurement
- 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 Lithium batteries that normally are used by similar instruments of other makes. The power consumption is low and a battery

can last up to a year depending on how the measurement is done.

Satellite-T measures temperature in the range -40°C to 80°C (-40°F to 176°F) . The resolution is always better than 0.1°C. This unique characteristic can be achieved since the instrument automatically changes its measuring span when so is required. Only one instrument is therefore required to cover a wide application range.

The sensor is fitted to the outside of the box which gives a time constant of only a few seconds. This means that the instrument can be used for measurements that require a fast response. It is simple to remove the sensor for calibration.

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

Satellite has a built in non-volatile data memory, therefore it will not lose its information if the battery runs out. There are two different memory sizes available, 4,500 or 20,000 measured values.

Satellite is part of the Mitec system for professional data acquisition. The measured data can be analyzed by WinSat or any of our standard programs WinLog or Monitor. The two last programs can also be used with other products from Mitec.



Mitec Satellite-T data logger

Technical Data Mitec SatelLite-T data logger

GENERAL

Number of measuring channels	1
Memory size	8k, 32k byte. 8k memory is standard, other are options.
Number of measured values	4,500 or 20,000.
Clock	Crystal controlled, date and time.
Registration interval	On time: 0.25, 0.5, 1.2, 5, 10, 15 or 30 secs. 1, 2, 5, 10, 15 or 30 min. 1, 2, 4, 6, 8, 12 or 24 hours.
Measuring frequency	Optional for each registration interval
Power Supply	1.5V battery LR6 (alkali) or Lithium size AA
Battery life span	1 month up to 1 year. (Depending on registration interval, measuring time and ambient temperature)
Ambient temperature	-40°C to +70°C (-40°F to +158°F). Non condensing.
EU standard	EN50081-1, EN50081-2, EN50082-1

INPUTS

Types	Temperature, replaceable thermistor (SatelLite-T). Snap-in fitting for external calibration.
Input selection	Automatic detection.
Resolution	12 bits
Linearising	Automatic
Temperature, SatelLite-T	
Measuring range	-40°C to 80°C (instrument max 70°C), external sensor 70°C to 80°C
Resolution	0.03°C to 0.1°C
Total inaccuracy with sensor	Max error: $\pm 0.3^{\circ}\text{C}$ @ -20 to 70°C $\pm 0.4^{\circ}\text{C}$ @ 70°C to 80°C and -40°C to -20°C
Sensor time constant	5-30 s to 90% depending on the air velocity.
Calibration	Simulated resistance sensor. Resistance standard traceable to international standards.

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.

MECHANICAL

Contact device	4 pole modular contact 4/4
Box	Aluminium 60 x 50 x 30 mm / 2.36 x 2 x 1.2 in.
Weight	80 g / 0.18 lbs. including battery.

Ordering information

Article number:	Sat-T/8, 4,500 measured values Sat-T/32, 20,000 measured values
The delivery includes:	1 Datalogger SatelLite-T including alkaline battery Manual in English
Accessories:	Analysis program WinSat, WinLog or Mitec Monitor PC-cable LPC-7 for PC

We reserve the right to make technical improvements without notice

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