



One instrument. All measurements.



Data logger Mitec AT40g
Portable universal field instrument.
Can be used with more than 700 sensors.



Temperature · Pressure · Flow · Level · Current · Energy · Voltage · RPM · Run-time · On/Off

Data logger Mitec AT40g

- Portable, low power consumption
- 8 universal inputs
- DC voltage, current, AC voltage, current, resistance, thermocouple, Pt100, thermistor, pulses, frequency, time, on/off
- Single-ended or differential inputs
- Memory-size 55,000 measuring values, 16-bit storage format
- Registration interval 1s to 24h, measuring interval max. 1s
- Measuring starts and stops manually on time or external trigger
- Stores average, maximum, and minimum values
- RS232, Centronics
- Supports GSM telephone and modem
- 9V battery. Switched powering of measuring sensors
- -20° to 50°C
- 185 x 100 x 34 mm

Ordering information

Mitec AT40 Data logger 8 sensors

Mitec AT31 Data logger 4 sensors

MEM40-240 Memory 240 000 measuring values

Delivered with nylon instrument case.

Analysis with Excel

Using a simple drive routine that can be downloaded from www.mitec.se, measuring data can be directly transferred to Microsoft Excel for further processing.

Mitec Monitor™

Mitec Monitor is Mitec's program for communication, database-management and presentation. Monitor can handle many measuring sensors and has automatic calendar-driven collection of measuring data. Advanced functions for analysis are built-in.

Monitor is available in server version with trend alarm to SMS and email, as well as automatic Internet presentation.

Mitec WinLog™

WinLog is a simpler version of Monitor suitable for smaller measuring projects where automatic communication is not required.

Download demos on www.mitec.se.

Mitec universal data logger Mitec AT40g

Mitec AT40g is a compact portable data logger with powerful performance. It is designed for measuring applications where flexibility, reliability and simple operation are a priority.

AT40g has universal inputs for a number of different measuring sensors which are identified and scaled automatically. Over 700 different standard sensors can be connected using Mitec's SmartCable concept.

The instrument's low power-consumption means that slow processes can be measured over several months. Measuring data is stored in an inbuilt memory with a large capacity.

Mitec AT40g is a robust and reliable instrument. More than 3 million operating hours have so far been clocked up by over a thousand users. More than 12,000 measuring sensors have been delivered.

Mitec AT40g is suitable for most applications where physical processes need to be registered and analysed in process, environment, energy and climate applications. AT40g forms the basis of a measuring system and can be supplied in fixed installations with different communication systems and software.

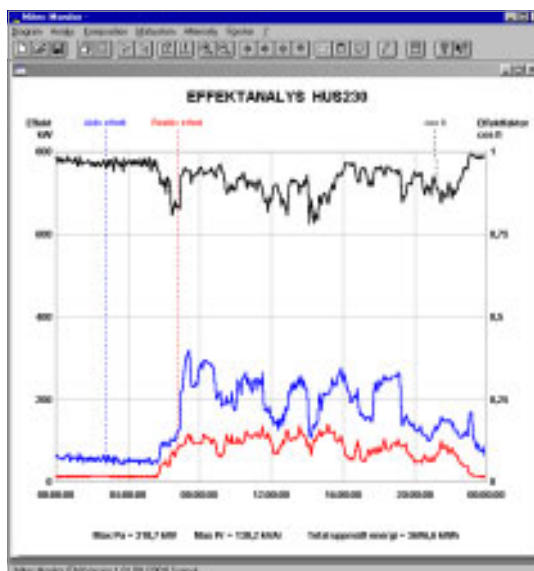
AT40g is developed and manufactured in Sweden by Mitec.

Communication and presentation

Measuring data is transferred to PC online during the process, or after the measurement is completed. Measuring data can be transferred to Excel or to one of Mitec's communication and analysis programs.

Mitec AT40g communicates via serial port with computer, GSM telephone or modem. A highly-secure communication protocol enables use in demanding environments such as radio or GSM transfer.

Up to 16 units can be connected in a multi-drop configuration which provides 128 measuring channels per communication link.



Mitec software is available in English and Swedish.



Mitec AT40g.

All sensors and signals can be connected

The Mitec AT40g's uniqueness lies in its flexibility and the ability to connect many different types of external signals and measuring sensors.

Signal inputs are completely universal which means that all eight channels can be used for virtually any type of signal, in any combination. AT40g checks which sensors are in use and adapts to them automatically.

The most common types are analog signals from measuring sensors and instruments, pulses from flow and energy and other meters, status signals (on/off) as well as time measurements.



Thermocouple sensors are connected via cable with inbuilt compensation for cold junction. Different types and ranges are supplied.



Sensors for measuring gas and liquid pressure can be powered directly from AT40g. Using a special switch technology, battery power can also be used.



No transformers are required for DC and AC signals, simply a connection cable. Inputs can be differential or single-ended, unipolar or bipolar.



Equipment that outputs pulses, such as flow-meters, electricity-meters, energy meters, counters etc are connected directly. Both voltage pulse and potential-free contact can be used.



A typical application is analysis of process and energy systems. Current clamps, electricity meters, voltage convertors etc can be used.

AT40g measurements

Sensors for the following types of measurement can be connected.

Angle	pH
Bridge sensors	Position
CH	Power
CO ₂	Power factor
Conductivity	Pressure
Current AC/DC	Pulses
Current clamp	Pyrometer
Dew point	Rainmeter
Dust concentr.	Resistance
Electrical field	Revolutions
Electricity meter	Rotor position
Flow	Speed
Frequency	Status
Humidity	Temperature
H ₂ S	Temp. Pt100
Hg	Temp. Pt1000
Light	Temp. thermistor
Magnetic ind.	Thermocouple J
Mass	Thermocouple K
NH ₃	Thermocouple T
NO ₂	Thermocouple N
Noise	Thermocouple S
O ₂	UV-light
Operating time	Voltage AC / DC
Oxy-meter	Volume



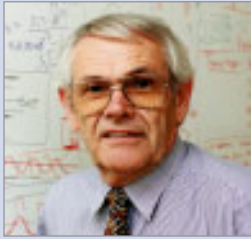
Mitec SmartCable™

Mitec SmartCables are used to connect signals and sensors to AT40g. SmartCable informs AT40g to scale the input signal and process information with the correct magnitude and unit in a range of languages.

No external "interface boxes" are needed and it is not necessary to remember any scale factors. Connect the cable to an input and the installation is ready! Around 700 different sensors, signals and instruments can currently be connected, and the range is continually expanding.

A list of the sensors that can be connected is available on www.mitec.se.

Would you like to be on our mailing list? Send an e-mail to info@mitec.se.



Mitec references

ABB Fastigheter
Affärshälsan
Alfa Laval AB
Arbetskyddsstyrelsen
Astra Pharmaceutical AB
Autoliv AB
Boliden Mineral AB
Carrier AB
Casco Nobel AB
Danfoss
Draco AB
Eka Chemicals AB
Ericsson Cable AB
ESAB
Findus AB
FM Mattson
Forbo-Forshaga AB
Frigoscandia AB
Gislaved AB
Gotlands Militärkommando
HSB
Honeywell
Hägglands Drives AB
Industriventilation AB
IFÖ Chemicals AB
Iggesund Paperboard AB
INU Control AB
IVL
JM Bygg
Kommunhälsan
Korrosionsinstitutet
Kronfägel AB
KTH
Lear Corporation
Pharmacia & Upjohn Biotech AB
Riksbbyggen
Riksdagens Förvaltningskontor
SAAB Automobil
SAS
Skanska
Statens Provningsanstalt
Svenska Marinen
Systembolaget
Sycon Energikonsult
Telia
TeraCom
Tetra Pak
Uppsala Universitet
Universitetssjukhuset Lund
Vattenfall
Volvo Personvagnar AB
Vägverket
Wasabröd AB
Ångpanneföreningen

Mitec's measuring system

Mitec AT40g is not just a handheld instrument, it is part of a flexible measuring system.

Mitec's measuring kits have become classics and are available in a number of different combinations to suit different applications.

- Complete field measuring system
- Robust design
- Application specific
- Expandable



Measuring stations for GSM networks

Mitec's measuring stations in the RSM40 series are based on the AT40g datalogger and GSM modem. The stations are part of Mitec's system for strategic machine monitoring and are available for different communication networks.

Information from individual stations can be collected directly to PC or form part of a larger network and be managed by Mitec's measuring server. Mitec can also deliver measuring services via www.it-sensors.com.



Mobile measuring stations

Measuring stations are also available in mobile design with inbuilt battery-operated GSM-modem with several months operating life. The measuring station is encased in a robust field measuring case.

All sensors for the AT40g-series can be connected.



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