SIMLog <u>Version "Temp-DS"</u> – Datasheet



Internet of Things ("IoT") solution for battery powered sensors.

Version "Temp-DS" optimised for digital temperature sensor and optional counter(s).

INFO: This datasheet covers only some basic features. For details, please see the manual or ask us. We will be happy to help you!

This product was designed and is produced in the European Community (EC).

Possible sensors

- 1 to 5 sensor channels for digital temperature sensors (see below)
- Default: 3 sensor sockets (for more than 3 sensors external Y-cables will be required)
- Option: 1 or 2 channels configurable as pulse counter ('S0') or state inputs (switches)
- Option: up to 90 sensor channels

Logger

- Based on ultra low power ARM CPU
- Battery supply: 4 * 1.5V AA battery (Alkaline or Lithium), integrated battery holder, easy to replace
- Internal temperatur and humidiy sensor (for intruding humidity in outdoor applications)

- Operation temperature: -40°C to +85°C (my be limited by batteries or SIM card, see below)
- Option: external 4.5V to 13.8V
- Current consumption:
 - Sleeping: ca. 5uA
 - Measuring: ca. 2 mA for 1sec
 - Internet transmission: ca. 50-100mA average for typically < 1min
- OLED display for local setup
- High-/Low- Alarms for each channel
- Local Flash data buffer 8-16MByte (non volatile), even on power loss
- Measurement period: 60sec 24h (default 15min)
- Internet period: 5min 7days (default set to 2h)
- With integrated SIM card (specified operating temperature range: -25°C...+60°C, storage range: -40°C...+85°C, software can retard transmissions for too cold conditions), valid in Europe ((EC, Norway, Switzerland), Russia and most Balkan States). <u>No contract required</u>!
- Default: GPRS over 2G
- Option: LTE-M1 or LTE-NB1

Battery live

Battery live depends on local temperature conditions and strength of local Mobile Network, these are typical values:

- Alkaline batteries: Up to 3000...5000 Internet transmissions with only 1 set of batteries (specified temperature range -15°C...+60°C), see manual
- Lithium batteries: Up to 8000 Internet transmissions with 1 set of batteries (specified temperature range -40°C...+60°C, software can retard transmissions for too cold conditions, so SIM will only be enabled for allowed temperature ranges), see manual

Cloud connectivity

For each Internet transmission the collected data are uploaded to a Cloud application. The user can change the device's parameters via Cloud. Details can be found in the manual.

- The Cloud is hosted in Europe in a reliable data centre
- Data is stored in a database (SQL) and for a certain period
- "Basic Plan" contains 3 months of historical data and up to 50MByte upload per year
- The Cloud contains user management and allows to build groups
- The (rough) geoposition of each device can be estimated (typically with 1...5km accuracy)

- Alarms are managed by the Cloud and can follow additional rules
- Alarms can be sent as E-Mail
- Option: Alarms can be sent as SMS

Mechanical

- Size of Logger ca. 159mm x 85mm x 60mm
- Standard with manual opener, no tools required to replace batteries
- Aluminium enclosure, IP68 1.2m/2h (optionally, if using screws for closing), else IP67 (manual opener)
- Weight (without batteries) ca. 750gr

Included Parts / Options

- Logger (with integrated SIM card, see above)
- Storage range -40°C..+85°C
- Operating range: depends on batteries and SIM card (software can retard transmissions for too cold conditions)
- 4 * AA Batteries (Alkaline)
- Mobile network antenna (external extension cable possible)

Temperature Sensors "Temp-DS"

- Precise digital sensor (industrial standard)
- Resolution 0.1°C
- Accuracy +/- 0.25°C in the range -5°C..+50°C (typical) and +/- 0.5°C in the range -10°C..+85°C (by production)
- Allowed operating range: -55°C to +85°C
- Standard sensor with 3mtr PUR cable, stainless steel tip and M8 connector (optionally longer cables)
- Standard sensor waterproof IP68 3m/0.3bar (optionally up to 10bar)

Feedback

We highly appreciate your feedback!

If you have any ideas, wishes or anything else, please contact us: <u>flexgate@flexgate.com</u>

