



Data logger DL709 / DL709-LTE

The data logger DL-709 is a compact device with a very low power consumption. The optional LTE modem is integrated in the data logger and is supplied by the data logger. By using the latest battery technologies, operating times of up to 10 years are possible (LTE up to 8 years)

- Onboard equipment up to:
 - 8 analog channels
 - 4 digital counter inputs
 - 3 digital alarm / status inputs
 - M-Bus (or mini = "LowPower") or Modbus interface
- Sensors:
 - Level, pressure, temperature, humidity ...
 - pH, conductivity, chemical quantities ...
 - Precipitation, flow and conditions ...
- Memory capacity $\geq 2.040.000$ values
- Serial / USB interface for PC
- Up to 8 years of battery life with daily measure value transmission (LTE)
- Protection class IP65

Options:

- Built-in LTE modem
- Send measurements and alarms to:
 - Control rooms and internet servers
 - Fax devices
 - GSM mobile phones
- Antennas:
 - Rod antenna (direct or with cable)
 - Directional antenna
- Power supply depending on the model:
 - Battery pack (alkaline)
 - External with solar panel and buffer battery
 - External with 12 VDC, 24 VDC, 110 VAC, 230 VAC and buffer battery
- Connection sockets RD24 for measuring cables and power supply

Technical data:

- Waterproof, rugged aluminum housing (IP65)
- Up to 8 analog measurement channels for sensors (resolution: 0.025 %)
- Adjustable measuring rate from 16 Hz up to 30 days
- Switched sensor supply (3 Volt \pm 5 %, loadable up to 10 mA)
- Measuring ranges:
 - Voltage: 0 – 1 V and/or "LowPower"
 - Current: 0 – \pm 20 mA, 4 – 20 mA
 - Event: e.g. Reed contact up to 1 event per second
 - Digital: Low < 10k Ω , High > 200 k Ω
 - Frequency: 0,01 Hz bis 10 Hz (optional 2 kHz)
- Storage capacity 4 GB to 32 GB (about 2,040,000 to 16,768,000 values)
- Powered by solar panel or power supply with additional buffer battery:
 - Power reserve for 1 month (rechargeable battery) or 12 months (buffer battery)
- Powered by batteries:
 - With adjustable alarm
 - Can be changed at the installation location
 - Display of the battery capacity for operation
 - Operating time without battery change under standard conditions:

LTE- transfer	Cycle			
	1 minute	5 minutes	15 minutes	60 minutes
all 15 minutes	5 months	5 months	6 months	6 months
hourly	16 months	16 months	18 months	18 months
all 6 hours	3,6 years	3,6 years	4 years	4 years
daily	6 years	6 years	8 years	8 years
without LTE	10 years	10 years	10 years	10 years

* The operating time is shortened when using the optional M-Bus and Modbus depending on the measuring clock.

- Dimensions: 175 mm x 80 mm x 58 mm (L x B x H)
- Weight: 1450 g (Battery version)

- Order number: **DL709 A 2102 m LTE**

