Standalone communicating data logger

LOG09V4

The **LOG09V4** is data logger is a standalone unit incorporating a battery and communication options such as GSM-GPRS (2G, 4G or LoRaWAN), depending on the model. The logger can be equiped with an interchangeable communication card allowing to switch from 4G to LoRa without changing the entire hardware.

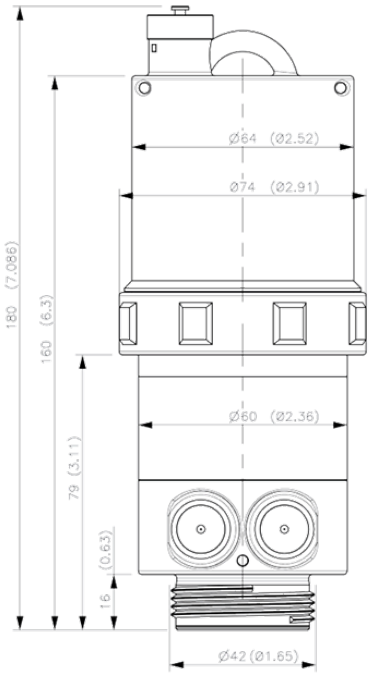
The configuration is done quickly and safely nearby, using a radio connection.

- **Wireless radio settings (Wiji protocol)**
- **Communication: local radio + optional communication card: 2G / 4G (LTE-M / NB-IoT) or LoRaWAN**
- **Memory: 500,000 measurements**
- **IP68 ingress protection (1 Bar/30 days)**
- **Long-life lithium battery**
- **1 external power input (5V - 30V)**
- **1 Modbus input or output**
- **2 x 4-20 mA analog inputs**
- **1 power output (internal battery or switch)**
- **1 Open drain output**

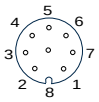
Applications	
• Area-Velocity Flow	• Combined Sewer Overflow
• Lift stations	• Water quality sensors
• Level and flow using pressure sensor	• Groundwater resources
• Rainfall measurement	• Access point HF/GPRS

Features	**LOG09V4-82-LTE (868 MHz) LOG09V4-92-LTE (915 MHz)**
Data logger	500,000 measurements
Concentrator	Yes
Inputs	• 1 Voltage input (5V - 30V) • 1 Modbus input (if not used as output) • 2 Current inputs (4-20 mA)
Outputs	• 1 Voltage output (5V-18V on internal battery or Vin switch) • 1 Open Collector Output • 1 Modbus output (if not used as input)
Communication	• HF radio (868 or 915 MHz) • 2G / LTE-M / NB-IoT (via FTPS, HTTPS, COAP or MQTTS protocols)
Radio communication	100M free-field (Wiji protocol)
Radio / mobile antenna	Internal or external radio - External mobile. See configurator for options overleaf.
Temperature range	-40°C to 85°C
Data logger material	PA12
Ingress protection	IP68 (only if using Ijinus mounting kit; P/N: H0T00053 or H0T00060)
Power supply	Battery: 3.6V 34Ah
Configuration	Wireless Programming Kit (PN: M0C00001) integrating AVELOUR software
Atex zone 2 certification Ex	II 3G Ex ic ec IIB T4 Gc Ambient temp: -20°C to 60°C
Certifications	CE - FC : SE6A002-A0102 / IC: 10983A-A002-A0102

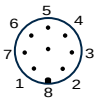
2G /4G Modem features		
Frequency Bands	**LTE-FDD**	Cat M1 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B26 / B27 / B28 / B66 / B85 Cat NB2 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B28 / B66 / B71 / B85
	GSM/EDGE	B5 / B19 / B3 / B2
RF Emission Power	**GSM 900** **GSM 1800** **LTE B1 / B3 / B8 / B20**	+ 33 dBm + 30 dBm + 23 dBm
B1 (2100) / B2 (1900) / B3 (1800) / B4 (1700) / B5 (850) / B8 (900) / B9 (1800) / B12 (700) / B13 (700) / B18 (800) / B19 (800) / B20 (800) / B25 (1900) / B26 (850) / B27 (850) / B28 (700) / B66 (1700) / B71 (600) / B85 (700)		



Wiring



Female



Male

Cable color	White	Brown	Green	Yellow	Grey	Pink	Blue	Red
8-pin connector: No.	1	2	3	4	5	6	7	8
Name	Vin	GND	Vout	Input OR Output	Input OR Output	Input	Input	Output Open-Drain
Features	(5 V - 30 V)	Ground	5 V - 18 V * (internal battery) or Switch Vout = Vin	RS485-H	RS485-L	Current 1	Current 2	Contact Grounding
Type	Power supply input		Power supply output	Modbus	Modbus	Digital	Digital	Open drain (1 A / 30 V)

* Maximum 1.8 W on V_{out} if the connected sensor is powered by the internal battery (voltage adjustable via software)

Options configurator				
LOG09V4	1x Power input (5 V - 30 V), 2x analog inputs (4-20 mA), 1x Modbus input OR output 1x Power Output (5 V - 18 V), 1 Open drain Output			
	Code	**Frequency**		
	8	868 Mhz Europe - China		
	9	915 Mhz USA - Canada - Australia		
		Code	**Antenna**	
		0	Internal radio	
		1	External radio	
		2	Internal radio / external mobile	
		3	External radio / external mobile	
			Code	**Communication options**
			Empty	Local radio communication
			LTE	Radio communication + 2G / LTE-M / NB-IoT
			LP1	Radio communication + LoRaWAN

LOG09V4-	8	2	LTE	= **LOG09V4-82-LTE**