

Standalone communicating data logger

LOG04V4


The **LOG04V4** 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 equipped 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 or NB-IoT) or LoRaWAN
- Memory: 500,000 measurements
- IP68 ingress protection (1 Bar/30 days)
- Long-life lithium battery
- 1 external power input (7V - 30V)
- 1 Modbus input or output
- 2 digital inputs: Digital or 100 Hz metering
- 1 power output (internal battery or switch)
- 1 Open drain output

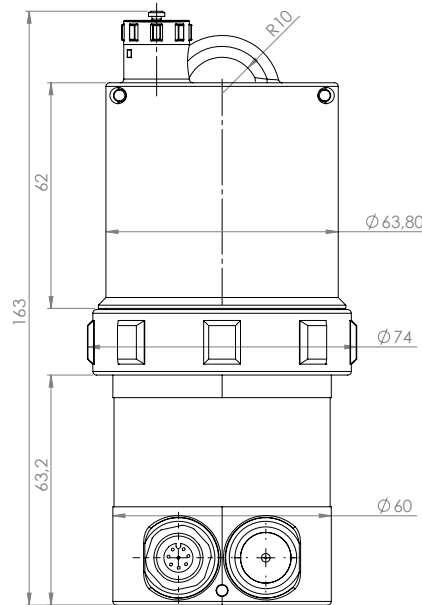
Applications

- Area-Velocity Flow
- Lift stations
- CSO / SSO
- Rainfall measurement
- Pressure measurement on drinking water networks
- Physico-chemical
- Drinking water flow measurement
- Electromagnetic flowmeter connection by Modbus

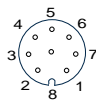
Features	LOG04V4	
Storage capacity	500,000 measurements	
Concentrator	Yes	
Inputs	<ul style="list-style-type: none"> • 1 power input (7V - 30V) • 1 Modbus input (If not already used as output) 	<ul style="list-style-type: none"> • 2 Digital inputs or 100 Hz metering
Outputs	<ul style="list-style-type: none"> • 1 power supply output (5V - 18V on internal battery) or Vin switch 	<ul style="list-style-type: none"> • 1 Open drain output • 1x Modbus output (If not already used as input)
Communication	<ul style="list-style-type: none"> • HF radio (868 or 915 MHz) • 2G / LTE M or NB IoT (via FTPS, HTTPS, COAP or MQTTS protocols) 	<ul style="list-style-type: none"> • LoRaWAN: Europe 863-870 MHz (SF12 for RX2) LoRaWAN Specification 1.0.2
Radio range	100 meters in open field (Wiji protocol)	
Radio hub function	Yes	
Radio / mobile antenna	<ul style="list-style-type: none"> • Internal or external radio 	<ul style="list-style-type: none"> • Internal or external mobile
Temperature range	-20 to 70°C	
Logger housing	PA12	
Ingress protection	IP68: 1 bar for 1 month (only if using Ijinus mounting kit; PN: H0T00053 or H0T00060)	
Power Supply	Internal : 3,6V 34 Ah lithium Battery - External : 7 ... 30 Vdc	
Configuration	Wireless programming kit (PN: M0C00001) with AVELOUR software, cable and antenna	
Certification Atex zone 2	II 3G Ex ic ec IIB T4 Gc Ambient temp: -20 °C to 60 °C	Certification:  SE6A002 - IC : 10983A-A002-A0102



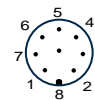
2G /4G Modem features		
Frequency Bands	LTE-FDD	Cat M1 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B26 / B27 / B28 / B66 / B85 Cat NB2 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B28 / B66 / B71 / B85
	GSM/EDGE	B5 / B19 / B3 / B2
RF Emission Power	GSM 900	+ 33 dBm
	GSM 1800	+ 30 dBm
	LTE B1 / B3 / B8 / B20	+ 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	On/Off 2 / Metering 1 100Hz	On/Off 2 / Metering 2 100Hz	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				
LOG04V4	1x Power input (5 V - 30 V), 2x digital or metering inputs, 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		
LOG04V4-	8	2	LTE	= LOG04V4-82-LTE