Standalone communicating data logger

LOG03V4

The **LOG03V4** is data logger is a standalone unit incorporating a battery and communication options such as GSM-GPRS 2G, 4G or LoRaWAN. The logger can be equiped with an interchangeable communication card allowing to switch from 4G to LoRa without changing the entire hardware. The logger 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 measures**
- **IP68 ingress protection (1 Bar/30 days)**
- **Long-life lithium battery**
- **1 external power input (5V - 30V)**
- **2 digital inputs: contact or 100 Hz metering**
- **2 analog inputs (4-20mA)**
- **1 power output (internal battery or switch)**
- **1 Open drain output**

Applications	
- Storm spillway - Lift stations - Underground water resource - Rainfall measurement - Height and flow by pressure sensor	- Pressure measurement on drinking water networks - Angle measurement on valve - Other 4-20mA output sensors - Drinking water flow measurement - Drinking water metering - Water sampler enslaving

Features	LOG03V4-82-LTE (868MHz) - LOG03V4-92-LTE (915MHz)	
Storage capacity	500,000 measurements	
Concentrator	Yes	
Inputs	- 1 power input (5V - 30V) - 2 analog inputs (4-20 mA)	- 2 Digital inputs (Contact or 100 Hz metering)
Outputs	- 1 power supply output (5V - 18V on internal battery) or Vin switch	- 1 Open drain output
Communication	- HF radio (868 or 915 MHz) - 2G / LTE M / NB IoT (via FTPS, HTTPS, COAP or MQTTS protocols)	- 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	- Internal or external radio	- Internal or external mobile
Temperature range	-20 to 70°C	
Sensor material	PA12	
Ingress protection	IP68: 1 bar for 1 month (only if using Ijinus mounting kit; PN: H0T00053 or H0T00060)	
Power	Lithium battery: 3.6 V - 34 Ah	
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: CE

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)		
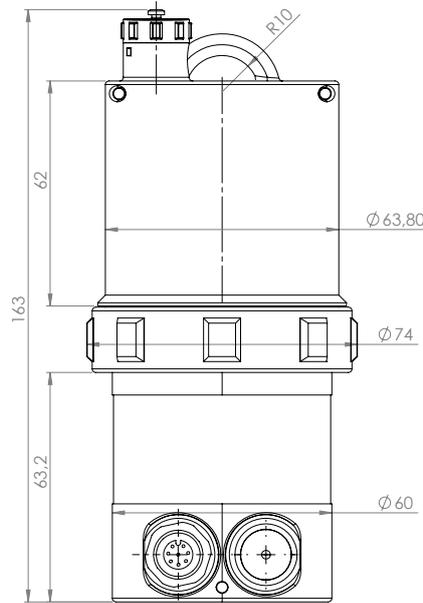
Wiring

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	Input	Input	Input	Output Open-Drain
Features	(5V to 30V)	Ground	5V to 18V * (internal battery) or Switch Vout = Vin	Current 1	Current 2	On/Off 1 / Metering 1 100 MHz	On/Off 2 / Metering 2 100 MHz	Contact Grounding
Type	Power supply input		Power supply output	4 - 20 mA	4 - 20 mA	Digital	Digital	Open drain (1A/30V)

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

Options configurator				
LOG03V4	1x Power input (5 V - 30 V), 2x digital inputs, 2x 4-20 mA analog inputs 1x Power Output (5 V - 18 V), 1 Open Collector 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	

LOG03V4-	8	2	LTE	= **LOG03V4-82-LTE**