

HRL-C-G3

Radio | Radio Module

DIEHL
Metering



APPLICATION

The HRLc G3 radio module integrates LoRaWAN® technology for remote reading solutions.

HRLc G3 can be easily clipped onto all modular Diehl Metering meters in the inductive range (Ha+Ti or Ti) equipped with a grey or red ring. HRLc G3 has a built-in inductive sensor that makes it insensitive to magnetic fraud.

Furthermore, it can be used with any pulse-emitting meter when combined with our IZAR BE PULSE interface.

FEATURES

- ▶ Compact radio transmitter for mechanical water meter
- ▶ Designed for LoRaWAN® fixed networks (operated or private)
- ▶ Available in 868 MHz
- ▶ Main Functions: Midnight index, Hourly consumption, Return flow volume, Minimum and maximum flow values
- ▶ Main Alarms: Fraud, Battery, Blocked meter, Temperature, Backflow, Overflow, Leak
- ▶ Insensitive to magnetic fraud
- ▶ Battery lifetime up to 15 years
- ▶ IP 68

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OPERATING PRINCIPLE

HRLc G3 includes an electronic circuit that collects the data coming from a Diehl Metering water meter and transmits all the meter information every 12 hours in LoRaWAN® fixed network mode.

LoRaWAN® fixed network:

Data are collected through the operated network to which the customer has subscribed or through a private network specifically deployed by the customer. Depending on the needs of each customer, it is possible to access the data either via the IZAR@NET 2 software or directly via the network operator interface (usually REST or MQTT API interfaces).

TECHNICAL DATA

HRL-c-G3	
Fixed Network Radio Protocol	LoRaWAN® Class A
Walk-by Radio Protocol	Vendor specific
Frequency	863 ... 868 MHz
Encryption	Individual key - AES-128/CTR
Transmission power	25 mW (14 dBm)
Transmission mode	Bi-directional
Radio range	Several km (LoRaWAN®) depending on network coverage
Standards	EN 300220 RED 2014/53/EU RoHS 2011/65/EU EN 60950 EN 62311:2008 EN 62479:2010 EN 301489 EN 50581:2012
Certification	LoRa Alliance®, Inc - According specification v1.0.1
Power supply	Lithium battery 3.6 V - Li/SOCI2
Battery lifetime	Up to 15 years*

*Standard conditions of use and temperature. Theoretical life, with no guarantee.

AMBIENT CONDITIONS

HRL-c-G3	
Ambient operating temperature	°C -10 ... +55
Storage temperature	°C -20 ... +65
Ambient humidity	% 0 ... 100
Degree of protection	IP 68

CONFIGURATION

HRL-c-G3	
Local interface	Bi-directional radio
Functions	Midnight index Hourly consumption Backflow volume Minimum and maximum flow values
Alarms management	Fraud Low battery Meter stopped Temperature Backflow Overflow Leak

COMPATIBILITY

HRL-c-G3	
Meters	Diehl Metering Ha+Ti or Ti inductive modular range . Pulse weight DN15 to DN40 (1 liter) Pulse weight DN50 to DN125 (10 liters) Pulse weight DN150 to DN300 (100 liters) CORONA MWi (D3/D4) DN15 to DN20(25) (1 Liter) DN25 to 50 (10 Liter)

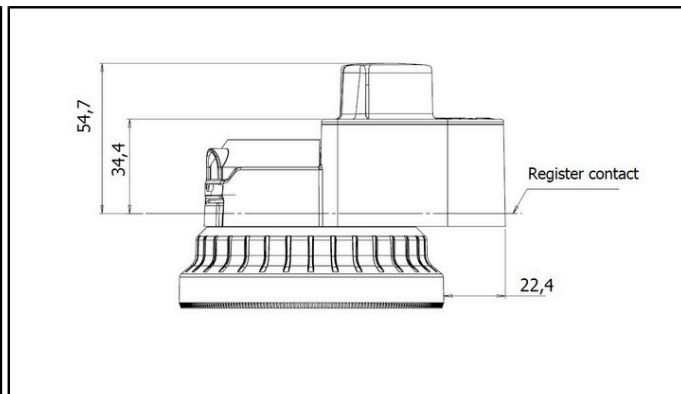
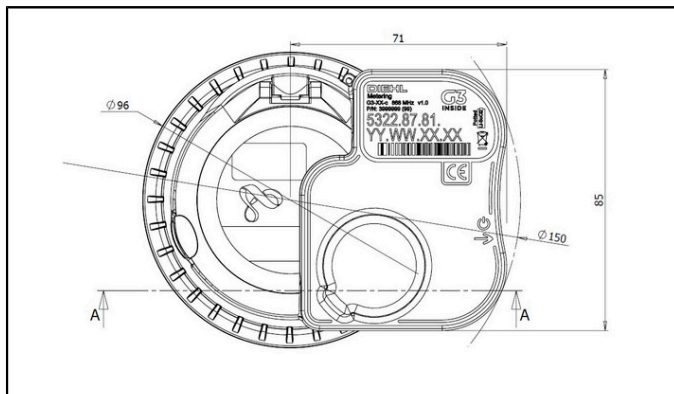
ACCESSORIES

- IZAR BE PULSE (interface for external radio module)
- IZAR PULSE i + IZAR BE PULSE KIT (pulse emitter + interface for external radio module)
- G3 LORA CONFIGURATION KIT (including Bluetooth® receiver, magnet, smartphone & configuration app.)

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DIMENSIONS



		HRL-c-G3
Length	mm	110
Height	mm	59
Width	mm	85
Total mass	g	214.2
EEE mass (2012/19/UE)	g	188.2
Battery & accumulator mass (2006/66/CE)	g	26
Lithium mass	g	0.9