DIEHL
Metering

HRL-C-G3

RADIO | RADIO MODULE



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

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	not available
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 I RED 2014/53/EU I RoHS 2011/65/EU I EN 60950 I EN 62311:2008 I EN 62479:2010 I EN 301489 I EN 50581:2012
Certification	LoRa Alliance®, Inc - According specification v1.0.1
Power supply	Lithium battery 3.6 V - Li/SOCl2
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 I Hourly consumption I Backflow volume I Minimum and maximum flow values
Alarms management	Fraud I Low battery I Meter stopped I Temperature I Backflow I Overflow I Leak

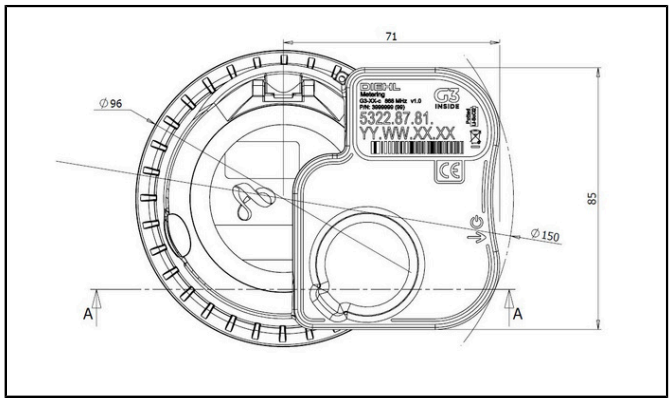
COMPATIBILITY

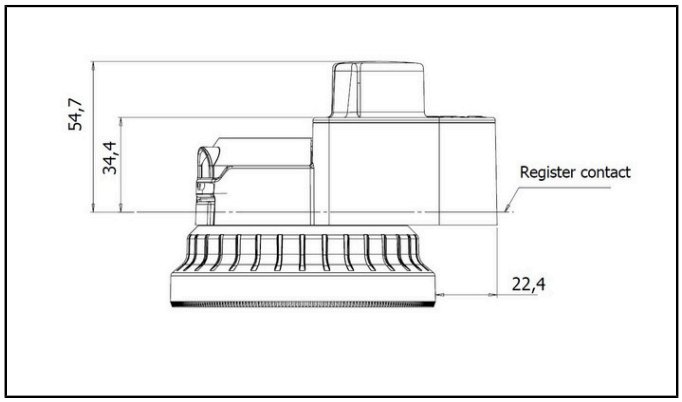
	HRL-c-G3
Meters	Diehl Metering Ha+Ti or Ti inductive modular range . Pulse weight DN15 to DN40 (1 liter) I Pulse weight DN50 to DN125 (10 liters) I Pulse weight DN150 to DN300 (100 liters) I CORONA MWi (D3/D4) DN15 to DN20(25) (1 Liter) DN25 to 50 (10 Liter)

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.)

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

Economic Actor Information

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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