



## LoRaWAN IP68 Rated Corrosion Resistant Low Power Radar Distance and Level Sensor

- Compatible with all LoRaWAN frequencies
- Wide range of industrial applications
- High accuracy and repeatability
- Designed to meet outdoor applications
- Long-term durable performance in harsh environment
- Ultra-low power
- Suitable for liquid and solid media



## TECHNICAL SPECIFICATION

### Sensor

• Range	10	m
• Accuracy (combined linearity, hysteresis, repeatability)	±0.25 (typ.)	%Span
• Resolution	±2	mm
• Sensor Minimum Distance	0 ~ 20	cm
• Process Pressure	-1 to 3	bar
• Frequency	80	GHz
• Beam Angle	15	°
• Compensated Temperature	-20 ~ +85	°C

### Power

• Power Supply	Built-in Replaceable Lithium Battery, External Power (option)	
• Rated Voltage	3.6	V
• Battery Lifetime	100,000+ readings and 20,000+ transmission (More than 10 years for most applications)	

### Physical

• Materials	Enclosure: POM, Sensor Head: PVDF, PA6 and Fiberglass	
• Weight	~700	g
• Protection Rate	IP68	

### Communication

• LoRaWAN® Version, Class	1.0.2revB, Class A (Class C on request)
• LoRaWAN® Frequency Zone	AS923, EU868, US902-928, AU915-928 (other zones available on request)
• LoRaWAN® Activation Type	OTA (default), ABP
• Sampling Type	Periodic (default), Event triggered
• Sampling Period	Configurable via downlink (default 4 hours)
• Transmission Type	Per sample (default), Event triggered, Conditional
• Parameter Configuration	Over-the-air via LoRaWAN® downlinks Locally via wireless connectivity
• Firmware Update	Locally via Wireless Connectivity, Over The Air

## NETWORK CONNECTION AND VISUALISATION

### Network Integration

- Integratable to all main networks (Actility, Alibaba, Cisco, Digita, Everynet, GeoWAN, Kerlink, kpn, Lorient, machine-Q, Objenious, Orange, Orbiwise, Proximus, Senet, Sens, Swisscom, TATA, The Things Network(TTN), TTI and any other network)

### Visualisation And Data Management

- Ellenex white label microservice platform, and Integratable to all main IIoT platforms directly or through the api (AWS, Azure, PTC ThingWorx, Bosch IoT, Cisco Jasper & Kinetic, Sierra Numerex, MathWorks, ThingSpeak, GE Digital Predix, LandisGyr, Siemens MindSphere, Cumulocity, myDevices, Ubidots, TagoIO, AllThingsTalk Maker, HPE IoT and any other major IoT platform).

### Ellenex Platform Main Features

- Encrypted ultra-low power communication protocol
- Advanced device inventory
- Integration APIs for enterprise systems
- Multi-tenant role-based access control
- Data export and import
- White-label platform for enterprise runs on private account
- Variable alarm setting for high and low thresholds and multi-channel alerting
- Sampling and transmission interval configuration
- Transmission condition configuration
- Other configurations and customisation available on request



Encrypted & ultra-low power



Integratable



Dynamic alerting



Multi-tenant


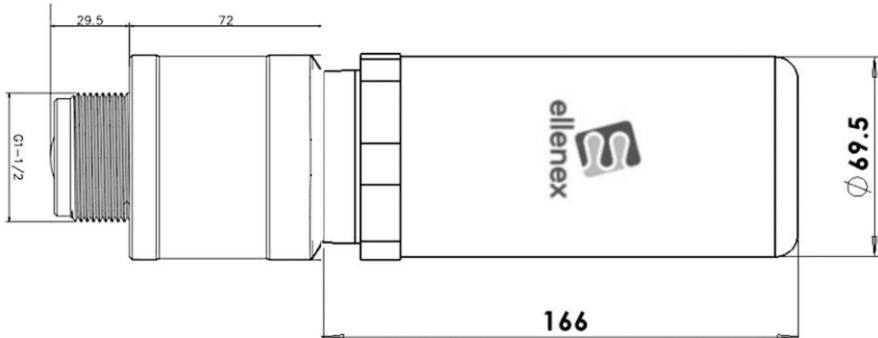


Scalable



Composable & API first

## MODEL GUIDE

Model	Option / Schematic
<p><b>C Model</b></p> 	 <p style="text-align: center;">Cylindrical compact, POM enclosure</p>

# DRC3-L Spec-sheet



## INDUSTRIES



Water & Environment



Agriculture & Farming



Oil & Gas



Marine & Oceanography



Mining & Construction



Smart Building & HVAC

## APPLICATIONS

- Flood alarming
- Manhole and underground water way
- Corrosive Liquid Storage
- Wastewater Tank

## ORDERING CODE

<b>DRC3-L</b>						
<b>LoRaWAN Frequency Zone</b>						
<b>AS</b> (AS923)		<b>AUx</b> (AU915-928) <small>(Sub Band x)</small>		<b>EU</b> (EU868)		<b>USx</b> (US902-928) <small>(Sub Band x)</small>
<b>LoRaWAN Activation</b>						
<b>A</b> (Over the air activation - OTAA)				<b>P</b> (Activation By Personalization - ABP)		
<b>Measurement Range</b>						
<b>10m:</b> 10 Meters						
<b>Device Activation</b>						
<b>X:</b> No Switch <small>(always on)</small>						
<b>Antenna Option</b>						
<b>IHG:</b> High Gain Internal						
<b>Options</b>						
<small>(On request)1</small>						
<b>DRC3-L</b>	<b>AS</b>	<b>A</b>	<b>10m</b>	<b>X</b>	<b>IHG</b>	

### Sample Product Code:

- DRC3-L-AS-A-10m-X-IHG**  
LoRaWAN AS923 radar distance sensor, range of 10m, with cylindrical housing (compact and IP68 rated), always on and with internal high gain antenna and LoRaWAN OTAA Activation.

# DRC3-L Spec-sheet



All details are subject to change without prior notice  
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