



### 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 and underground applications
- Long-term durable performance in harsh environment
- Ultra-low power
- Suitable for liquid and solid media



#### **TECHNICAL SPECIFICATION**

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Range	10	30	m
<ul> <li>Accuracy (combined linearity, hysteresis, repeatability):</li> </ul>	±5	±2	mm
<ul> <li>Resolution</li> </ul>	Sub mm	Sub mm	
<ul> <li>Sensor Minimum Distance</li> </ul>	0 ~ 20	0 ~ 20	cm
Process Pressure:	-1 to 3	-1 to 3	bar
Frequency:	80	80	GHz
Beam angle:	8	4	0
Compensated Temperature:	-20 ~ +60	-20 +80	°C

#### **Power**

Power Supply	Built-in Replaceable Lithium Battery, External Power (option)
<ul> <li>Rated Voltage (V)</li> </ul>	3.6
Battery Lifetime	5,000+ readings and 5,000+ transmission (More than 5years for most applications)

#### **Physical**

<ul><li>Materials</li></ul>	Enclosure: POM, Sensor Head: PVDF, Seal: PKF
Weight (g)	~700
<ul> <li>Protection Rate</li> </ul>	IP68, UV Protected

#### Communication

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





#### **NETWORK CONNECTION AND VISUALIZATION**

#### **Network Integration**

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

#### **Visualization And Data Management**

 10Sorex 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, TagolO, ALSO AllThingsTalk, HPE IoT and any other major IoT platform).

#### **10Sorex 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 customization available on request



Encrypted & ultra-low power



Multi-tenant



Integratable



Scalable



Dynamic alerting



Composable & API first



www.10sorex.com



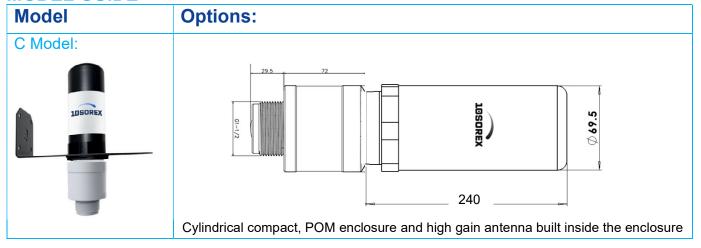
Sales@10sorex.com



+1 (424) 400-4964



#### **MODEL GUIDE**



#### **INDUSTRIES**



#### **APPLICATIONS**

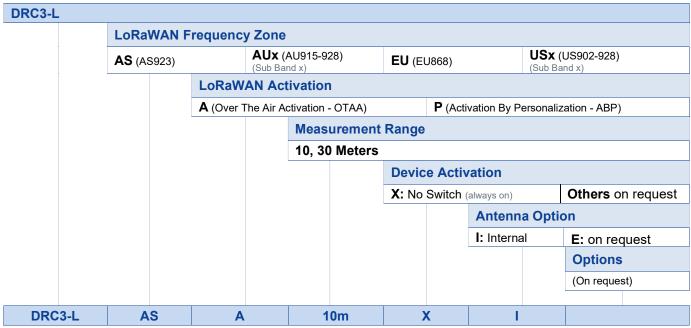
- Flood alarming
- · Corrosive Liquid Storage

- Manhole and underground water way
- Wastewater Tank





#### ORDERING CODE



#### **Sample Product Code:**

• DRC3-L-AS-A-10m-X-I

LoRaWAN<sup>®</sup> corrosion resistant radar distance sensor, frequency AS923, over the air activated, measurement range of 10m, with cylindrical housing (compact and IP68 rated), always on and with internal antenna.

