

# BARRA



# RADAR BLE

Bluetooth® Low Energy (BLE)

- High-precision radar sensor for object detection and distance measurements
- Pairs to Digital Matter BLE gateway devices
- Powered by 2 x AA user-replaceable batteries with 5+ years battery life
- Quickly configurable with Barra Radar companion app for Android and iOS



Digital Matter BLE Ecosystem



'Deploy Once' Battery Life



Ultra-Rugged and Waterproof



Highly Configurable



White-Label & Integration Ready

## Tank Fill Level Monitoring

Report exact distance to water/fill line.

## Millimetre Accuracy

Tune settings to retrieve distance variations down to the smallest increment.

## Asset Utilization

Determine whether an asset is travelling loaded or unloaded with object detection.

## Phone App

Change all aspects of configuration via Bluetooth connection to a smartphone with the Barra Radar app.

## High Penetration

Detect objects behind glass, plastic and other non-ferrous materials.

## Wire-Free Installation

Multiple installation options for securing device to asset or concealing within.

**LOGISTICS | PALLETS & CARGO | AGRICULTURE | RESOURCES | EQUIPMENT**

## Connectivity

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Bluetooth® 5.3 Beacon	Silicon Labs BGM240P Low Energy Beacon for transmitting sensor data
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## Sensors

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Radar Chipset	Acconeer A121 60GHz Pulsed Coherent Radar (PCR)
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Radar Range	150mm – 15000mm
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Radar Minimum Steps Resolution	2.5mm
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Radar Maximum Steps Resolution	300mm
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Lens Type	Plano Convex
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Lens Angle of View	~15°
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Minimum Scan Interval	1s
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Maximum Scan Interval	2 hours
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Number of Simultaneous Distance Measurements	2
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## Power

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User-Replaceable Batteries	2 x AA. Batteries not included. Widely available at most hardware or retail locations.
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Supported Battery Types	Lithium Battery selection is very important. <a href="#">Follow this link to learn more.</a> Please dispose of Lithium batteries in a safe and responsible manner.
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Battery Life Estimates*	2 Hourly Scans** – 8+ years 30 Minutely Scans** – 8+ years 5 Minutely Scans** – 7+ years
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Sleep Current	<20uA Average current in lowest power state.
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\* Battery life estimates are influenced by several factors including scan range, scan steps, BLE advertising power, BLE advertising interval, battery selection and more. Battery life calculators are available at [support.digitalmatter.com](https://support.digitalmatter.com).

\*\* Estimates are based on 2-second advertisement windows, 8dB advertisement power, scanning for objects starting 1m from the PCB and ending 4m from the PCB. Devices can be configured to scan larger distances with high resolution more frequently which will negatively impact battery life estimates.

## Mechanics / Design

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Dimensions	149 x 51 x 28 mm (5.9 x 2 x 1.1 in)
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Device Weight	117g with Energizer Ultimate Lithium batteries.
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Housing	Non-branded nylon glass housing is suitable for white labeling.
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IP/IK Rating	Ultra-rugged and waterproof IP68 and IK07-rated housing ensures the device can withstand impact, fine dust, and brief submersion.
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Installation	Compact and concealable. Multiple installation options for covertly and easily securing the device to assets with screws, bolts, cable ties, rivets, and more. Stainless steel screws provided.
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Temperature Range	Operating: -30°C to +60°C Recommended Storage: 10°C to 30°C, Humidity 30%. Store in a cool, dry place.
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Diagnostic LED	Diagnostic LED indicates operation status.
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## Smarts

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Detection Threshold

Define two distances to form the min and max detection range for measurements and objects.

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## Device Management

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Configuration App

Barra Radar Configurator App

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## Warranty

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Manufacturer's Warranty

Two-year manufacturer's warranty. [Exclusions apply.](#)

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## Certifications

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Please check our knowledge base for [regulatory and network certifications](#).

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