

BORADAR PROXIMITY

Proximity Sensor

Obstacle avoidance and proximity sensing solution for UAVs, robotic and autonomous platforms.



UART / RS485 / CAN



DC 9-24 V



112° Horizontal FOV

KEY FEATURES



Obstacle Avoidance

Detects surrounding obstacles and provides early warning for safe maneuvering.



Wide Horizontal FOV

Provides wide-area scanning with a 112° horizontal field of view.



Accurate & Stable

Delivers accurate and stable measurements at close range.



Compact Design

Lightweight and compact for easy integration across platforms.



Safe Operation

Real-time distance data supports safe navigation and collision avoidance.



Multiple Interfaces

Broad system compatibility via UART, RS485 and CAN.



Easy to Use

Simple configuration enables rapid deployment.



Rugged Construction

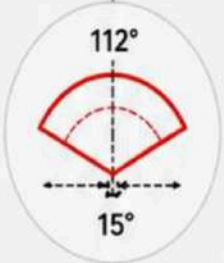
Reliable and stable operation under demanding conditions.

PRODUCT OVERVIEW



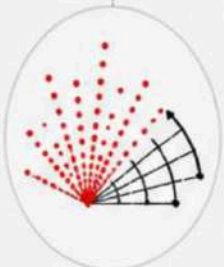
Proximity Sensor Radar

BORADAR PROXIMITY provides proximity sensing and obstacle avoidance support for UAVs, robots and autonomous platforms.



Wide Detection Angle

Monitors a wide frontal area with a 112° horizontal detection angle and 15° elevation angle.



Flexible Data Output

Provides target data, sector reports and point-cloud outputs to various control systems.



Interfaces & Configuration

Supports parameter configuration and target output via UART, RS485 and CAN interfaces.



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Radar sensor for obstacle detection and safe approach on UAV, robotic and autonomous platforms.



PRODUCT FEATURES



1. Obstacle Avoidance

Detects surrounding obstacles and provides early warning for safe maneuvering.



2. 112° Horizontal FOV

Wide frontal scanning enables effective proximity sensing.



3. 15° Elevation Angle

Helps monitor frontal targets with improved control.



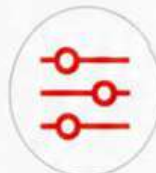
4. Target & Point-Cloud Output

Provides target and point-cloud data for flexible integration.



5. Communication Interfaces

Supports UART, RS485 and CAN interfaces.



6. Parameter Configuration

Supports configuration and target output through the interfaces.



7. Low Power Consumption

Efficient operation with typical power consumption of 1.2 W.



8. Easy Integration

10-wire cable and compact enclosure simplify system integration.

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Obstacle avoidance and proximity sensing solution for UAVs, robotic and autonomous platforms.



TECHNICAL SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Unit / Notes
SYSTEM & POWER				
Supply Voltage	9	12	24	V
Power Consumption	-	1.2	-	W
Connection Type	-	10-wire cable	-	-
Dimensions (L x W x H)	-	84.0 x 55.6 x 13.1	-	mm
SENSING & OUTPUT				
Product Type	-	Proximity sensor / obstacle avoidance radar	-	-
Horizontal Detection Angle	-	112	-	deg
Elevation Angle	-	15	-	deg
Output Types	-	Target data / sector data / point cloud	-	-
Valid Zone Count	-	Up to 5	-	-
COMMUNICATION				
Supported Interfaces	-	UART / RS485 / CAN	-	-
UART Baud Rate	-	460800	921600	bps
UART Data Format	-	8 data / 1 stop / no parity	-	-
RS485 Baud Rate	-	460800	921600	bps
RS485 Data Format	-	8 data / 1 stop / no parity	-	-
CAN Baud Rate	-	500	1000	kbps

BORADAR PROXIMITY

Proximity Sensor

BORADAR PROXIMITY detects nearby obstacles to support safe clearance and collision avoidance.



APPLICATION AREAS



UAV Obstacle Avoidance



Nearby environment sensing and safe route support during flight.



Autonomous Ground Vehicles



Proximity sensing for collision avoidance and situational awareness.



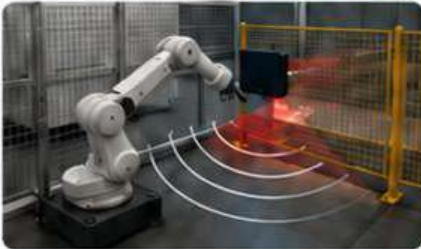
AGV / AMR Systems



Supports safe motion in warehouse and logistics applications.



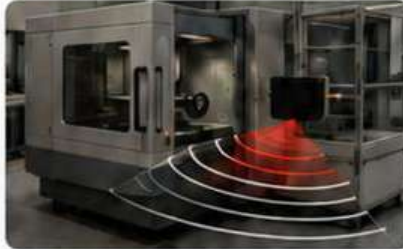
Industrial Robotics



Safety monitoring and proximity tracking around workstations.



Smart Machines



Target detection and safe operation around machinery.



Service & Mobile Robots



Near-field environment monitoring for indoor navigation.



Multiple Interface Support:

UART / RS485 / CAN



Power:

DC 9-24 V



Detection Angle:

112° horizontal / 15° elevation