Ban50 Radar

Long range radar detector up to 24m for boom gates

The **Ban50** delivers long-range, high-sensitivity radar detection - perfect for vehicle presence and collision avoidance in harsh outdoor applications.
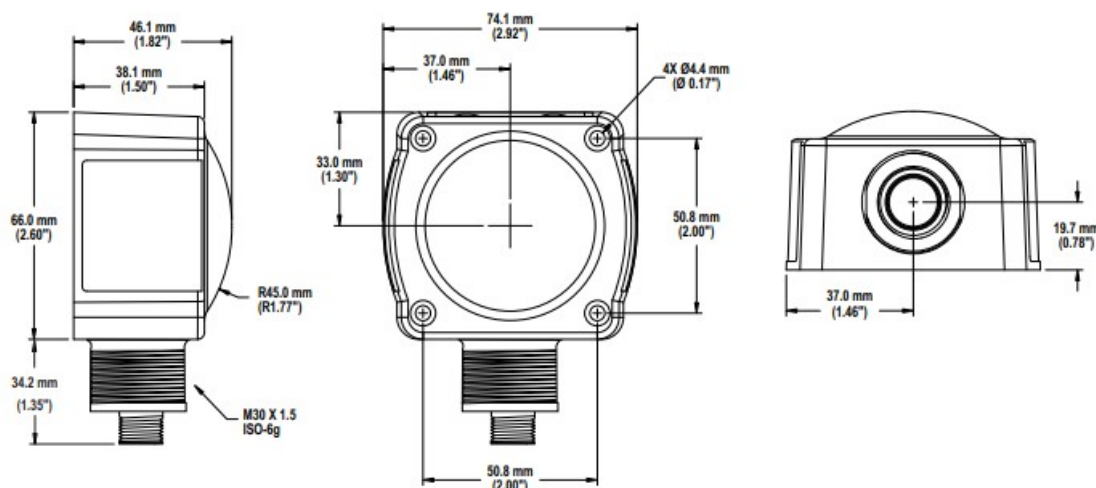
Operating in the 24 GHz ISM band using FMCW (time-of-flight) technology, the Ban50 detects both moving and stationary objects up to 24m.

It is an ideal solution for long-range vehicle detection, enabling automatic boom gate activation and free exit control. Designed for industrial vehicle zones, it enhances safety and reliably detects obstacles even in harsh or highly reflective environments.

Key Features:

- Adjustable sensing range: from 2m to up to 24m
- Reliable operation in all conditions: Unaffected by wind, rain, snow, fog, high/low temp or sunlight
- Easy DIP-switch setup: Configure range, sensitivity, and output behavior quickly - no PC needed
- Flexible output options: Bipolar NPN/PNP outputs available as Normally Open or Normally Closed
- Telecom approved for Europe, UK, Australia, New Zealand, China, and Japan
- Rugged IP67 housing: ABS/polycarbonate enclosure rated for −40 °C to +65 °C

Dimensions

Technical Specifications

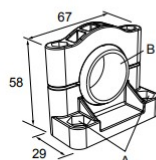| Feature	Specification
Operating Frequency	24 GHz FMCW ISM band
Sensing Modes	Adjustable-Field (AF): up to 24m
Beam Angle (H × V)	90° × 76°
Housing Rating	IP67 (ABS/Polycarbonate)
Supply Voltage	12–30 V DC
Outputs	Bipolar NPN/PNP, selectable NO/NC
Response Time	Typically 30–50 ms (configurable via DIP ~30–600 ms)
Operating Temp.	−40°C to +65°C
Connection	M12 5-pin Quick-Disconnect (QD) or 2m flying leads cable
Adjustments	DIP switch selection
Window Compatibility	Can be mounted behind glass or plastic (~20 % signal reduction)

Accessories/Options

Mounting Brackets

All measurements are listed in millimeters, unless noted otherwise.
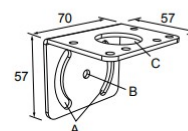
SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

SMB30MM
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
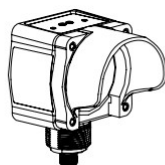- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1
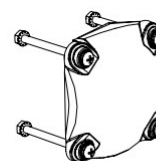
Weather Deflectors and Shields

QT50RCK Weather Deflector
- Required if the R-GAGE is exposed to rain or snow
- Prevents buildup of water or ice from interfering with sensor performance

QT50RWS Weather Shield
- Coated to help repel water and maximize signal strength
- Hardware included for easy installation and replacement

Sensor Configuration

DIP Switch Functions

Switch	Function
1, 2, 3	Sensing distance (detects objects from sensor face to this point)
4, 5	Sensitivity (higher sensitivity sees weaker objects and has a larger beam pattern)
6	Normally open/normally closed output functionality
7, 8	Response Speed

DIP switch 1 is on the left and DIP switch 8 is on the right.