

DATASHEET

RLD-800 Dual-Wave Radar Loop Detector



RLD-800

Specifications

Input Voltage	DC 9-24V, $\geq 200\text{mA}$
Working Frequency	24 GHz
Detection Distance	1 - 6 meters, ± 0.1 meters
Modulation Mode	FMCW
Transmitting Power	10-12 dBm
Antenna Configuration	2 Tx + 2 Rx (dual-wave: width + height)
Width Antenna (X-Axis)	Horizontal $35\pm 5^\circ$ · Vertical $15\pm 3^\circ$
High Antenna (Y-Axis)	Horizontal $15\pm 3^\circ$ · Vertical $35\pm 5^\circ$
Horizontal Beam	$< 30^\circ$
Vertical Beam	$< 17^\circ$
Operating Temperature	$-40^\circ\text{C} \sim 85^\circ\text{C}$
Ingress Protection	IP67

Order Information

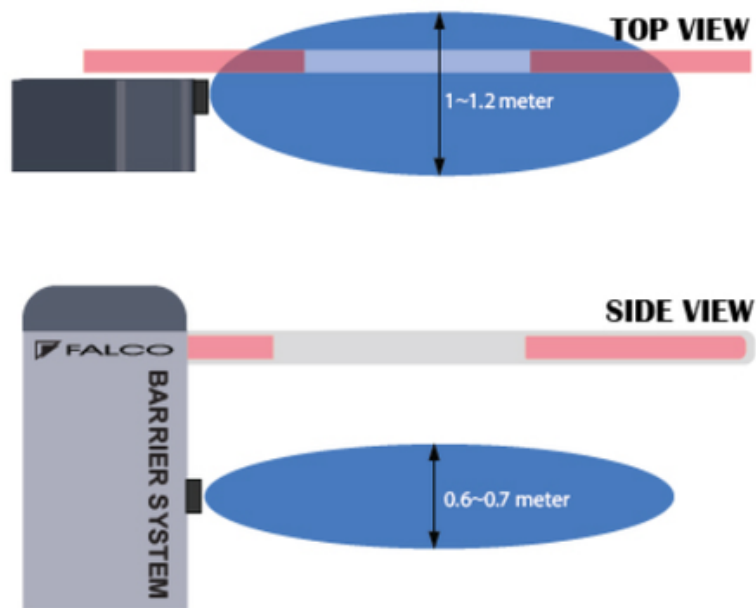
RLD-800

Model: RLD-800 Dual-Wave Radar Detector

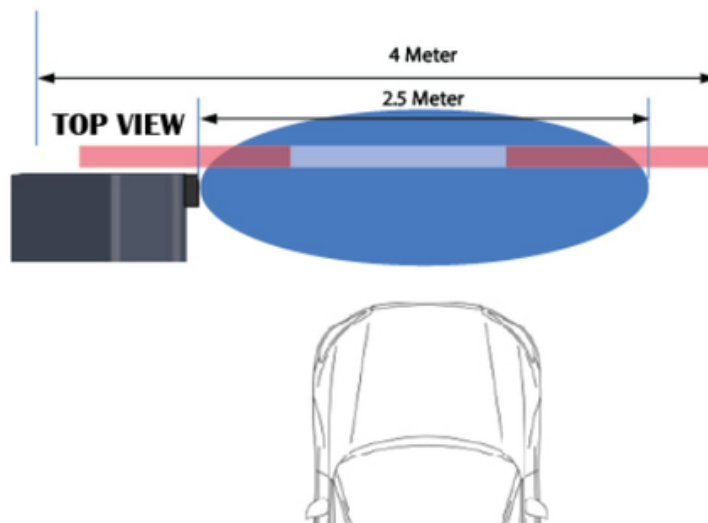
DATASHEET

RLD-800 Dual-Wave Radar Loop Detector

Detection Range



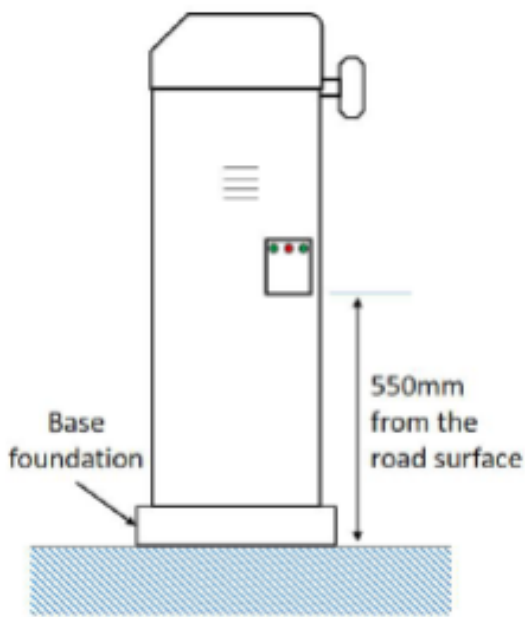
Suggested to maintain default detection range 2.5m which is sufficient to accurately detect typical vehicle within 4m barrier arm.



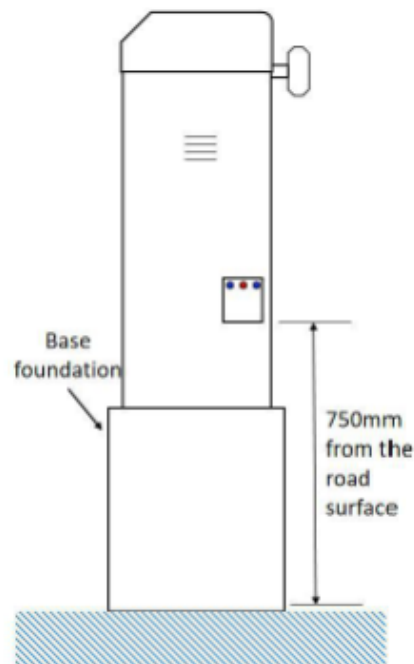
DATASHEET

RLD-800 Dual-Wave Radar Loop Detector

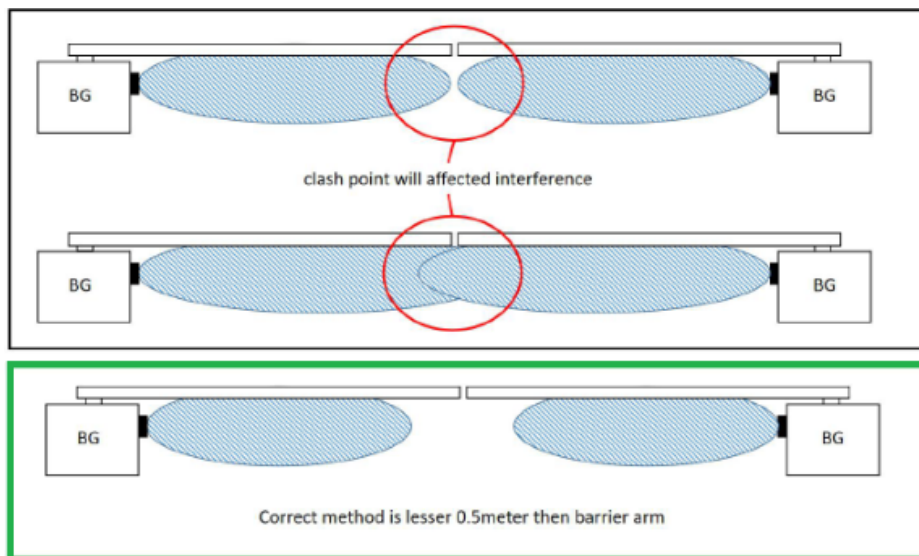
Recommended Installation



High Base Installation



For higher base foundation, traffic detector location must be in the middle between the road surface and below the barrier gate arm. Sensitivity must be set to high.

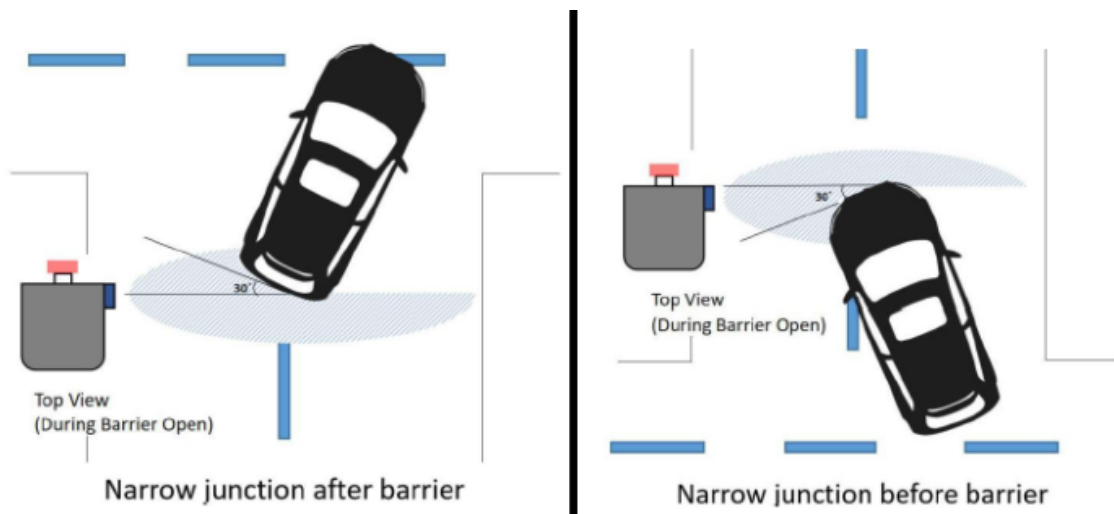


DATASHEET

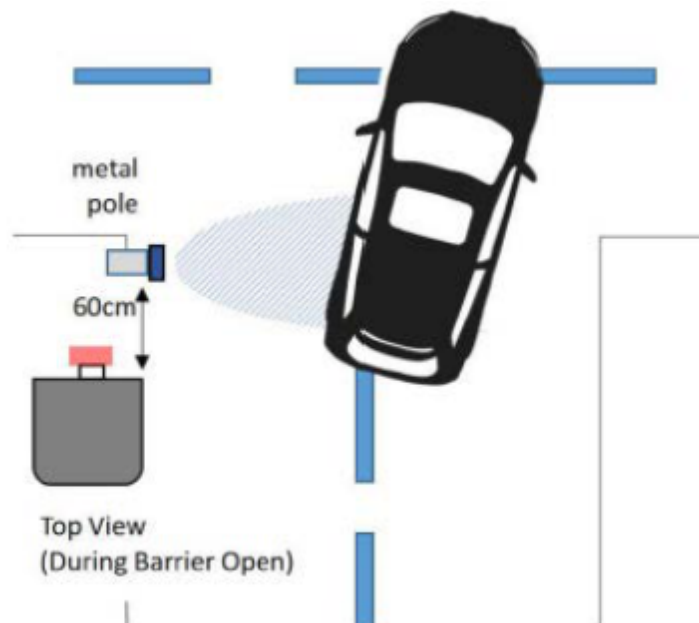
RLD-800 Dual-Wave Radar Loop Detector

Narrow Turn Installation

For cases where vehicle lane that leading to a narrow junction, traffic detector will miss detect if vehicle enter or exit at 30° angle. This might cause the barrier arm come down even though the vehicle have not fully pass through.



Solution : Traffic detector is recommended to install separately onto a metal pole. Metal pole should be 60cm away from barrier gate to prevent miss detection.



DATASHEET

RLD-800 Dual-Wave Radar Loop Detector

Trigger Mode Installation

For trigger mode scenario, RLD-800 is recommended to install at a separate metal pole that 2000mm to 3000mm away from long range access card reader metal pole.

