

KX-FW2501ZR3

24 GHz Speed Detector



- · Fast response ensures high capture rate and real-time signal processing.
- \cdot Advanced radar signal processing and real-time data processing technologies.
- \cdot Adopts new algorithm for enhanced location stability and prolonged operation sustainability.
- \cdot Ideal for flexible and extensive applications.

Installation

 \cdot Low microwave radiation and power consumption, long service life, and high stability and reliability

Basic	
Antenna	Microstrip planar array antenna
Modulation	Continuous wave (CW) modulation
Frequency	(24.150±0.045) GHz
Transmit Power	20 dBm
Antenna 3dB Beamwidth	6°(H) × 6°(V)
AD Sampling Frequency	37 KHz
Communication	RS-232
Cable	Red: 12V+ DC
	Black: 12V- DC
	Yellow: RS-232 RXD
	Green: RS-232 TXD
	Brown: RS-232 GND
Performance	
Distance Accuracy	±0.5 m (1.64 ft)
Lane Coverage	1 lane
Object Data	Vehicle speed (instantaneous)
Capture Rate	≥95%
Indoor Speed Simulation Error	-4 km/h to 0 km/h
Speed Error during Road Test	Error when vehicle speed <100 km/h: -4
	km/h to 0 km/h
	Error when vehicle speed ≥100 km/h: -4% to
	0%
Speed Detection Range	10 km/h-250 km/h
Capture Distance	18 m-38 m (59.06 ft-124.67 ft) when the
	radar is installed at around 6 m (19.69 ft) hig
General	
Power Input	12V DC, with over-voltage, over-current, and
	reverse connection protection for safe and
	stable power input
Interface Protection	Output interfaces are designed with over-
	current and over-voltage protection
Operating Environment	Operating temperature: -40°C to +80°C (-
	40°F to +176°F)
	Operating humidity: 10%RH–90%RH
Dimensions	Radar: 209.9 mm × 210.0 mm × 35.0 mm
	(8.27'' × 8.27'' × 1.38'')
	Bracket: 163.4 mm × 100.0 mm × 155.0 mm
	(6.43" × 3.94" × 6.10")
Weight	1 kg (2.2 lb) (bracket excluded)
Accessory	Bracket
Installation	Pole-mounted

