

24GHz Sensors

	Type 44	Type 45
PERFORMANCE	4D/HD Resolution	
Detection Range (Pedestrian)	55m	50m
Detection Range (Motor Bike)	80m	140m
Detection Range (Passenger Car)	120m	150m
Detection Range (Truck)	180m	
Instrumented Range	180m	
Minimum Range	1m	
Range Discrimination	≤ 2.2m	
Range Accuracy	Typ. < ±1% or < ±0.25m (bigger of)	
Speed Intervall	-88.8...+88.8ms	
Speed Discrimination	0.35m/s	
Speed Accuracy	Typ. < ±0.28ms or ±1% (bigger of)	
Field of View (Azimuth)	-40°...+40°	-16°...+16°
Field of View (Elevation)	-12°...+12°	-7.5°...+7.5°
Angle Accuracy (Azimuth)	≤ 0.5°	
Update Time	< 75ms	
MECHANICAL		
Weight	340g	
Dimensions	110 x 99 x 36,7mm	
Enclosure	IP67	
ENVIRONMENTAL		
Operation Temperature	-40°...+85°C	
Shock; Vibration	100grms / 14grms	
GENERAL		
Frequency Band; EIRP	24.0...24.25GHz;	
Power Supply	8...32V DC; < 5W	
Connector	12 Pin plug Hirose LF10WBRB-12PD	
Communication Interface	CAN, RS485, Ethernet	

77-79GHz Sensors

	Type 132		Type 146		
PERFORMANCE	4D/UHD Resolution		4D/HD Resolution		
Range Mode	Long	Medium/Short	Long	Medium	Short
Detection Range (Pedestrian)	80m	50m	30m		20m
Detection Range (Motor Bike)	110m	64m	40m		20m
Detection Range (Passenger Car)	175m	64m	85m	55m	20m
Detection Range (Truck)	175m	64m	85m	55m	20m
Instrumented Range	175m	64m	85m	55m	20m
Minimum Range	1.4m	0.6m	0.6m	0.4m	0.15m
Range Discrimination	≤ 1.8m	< 0.66m	< 0.9m	< 0.6m	< 0.3m
Range Accuracy (bigger of)	< 0.5m or 1%	< 0.25m or 1%	< 0.5 m or 1%	< 0.3m or 1%	< 0.15m or 1%
Speed Interval (m/s)	-111.1 to +55.6	-102.8 to +47.2	-84.4 to +38.9		-111.1 to +38.9
Speed Discrimination	< 0.26m/s		< 0.15m/s		
Speed Accuracy	< ±0.1m/s		< ±0.1m/s		
Field of View (Azimuth)	-16°...+16°	-50°...+50°	≥ 130°		
Field of View (Elevation)	≥ 10°		15°		
Angle Discrimination (Azimuth)	4°	15°	30° (optional)		
Angle Accuracy (Azimuth)	≤ 0.2°	≤ 0.5°	≤ 0.5°		
Update Time	≤ 55ms		≤ 50ms		
MECHANICAL					
Weight	≤ 200g		≤ 110g		
Dimensions	95 x 85 x 43.08mm		69 x 81.3 x 21.9mm		
Enclosure	IP67		IP67		
ENVIRONMENTAL					
Operation Temperature	-40°...+85°C		-40°...+85°C		
Shock; Vibration	100grms / 14grms		100grms / 14grms		
GENERAL					
Frequency Band; EIRP	76...77GHz		77...81GHz		
Power Supply	8...32V; < 5W		7...32V; < 5W		
Connector	Hirose LF10 series		8 Pin Plug ACES / TE Connectivity		
Communication Interface	CAN, RS485, Ethernet		2x CAN (HD), BroadR-Reach Ethernet		