Tyco Radar Detection
Enhanced Perimeter Security

Features

High performance for outstanding detection

- MIMO & digital beam-forming technology ensures best-in-class resolution and performance
- Detection range of 150m to 1km for person, vehicle or boat
- 100°-120° supreme azimuth coverage & a staggering 30° elevation coverage up to the installation pole that eliminates all "dead zones"
- <1m high range accuracy and 0.7° -1° azimuth accuracy
- Supreme detection under all weather and lighting conditions
- FCC compliant
- Low power consumption edge processing driven extreme power & data efficiency: easy solar + wireless integration

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Tyco radar series now consists of 5 distinct models for use in various installations. The growing range of high-performance radar sensors by Tyco provides customized environments for detection and protection that are appropriate for your perimeter monitoring applications. Our sensors' superior detection performance and low false alarm rate provide the user with an optimized security solution that is also cost-effective.

Radar sensors' inherent advantage is in their ability to instantaneously cover large areas without loss of resolution. Combined with AI-enabled MASS software and Illustra PTZ cameras, our solutions provide continuous coverage of secure and managed perimeters.

Tyco radar easily integrates with American Dynamics VideoEdge and Exacq VMS platforms.

The Tyco radar solution includes state-of-the-art technology such as advanced target tracking, MIMO signal processing for improved angular resolution, and zero-Doppler processing for tracking slow-moving and tangential targets.

Tyco Radars are designed for long service life in all weather without any maintenance. A combination of minimal part count, no moving parts, and robust design ensure very high MTBF in any condition.

Technical Specifications

Specification	150m	250m	500m	1000m	SCEPTER
Description	5.8GHz Sensor 150m range, 1.2m resolution	5.8GHz Sensor 250m range, 1.2m resolution	5.8GHz Sensor 600m range, 1.2m resolution	5.8GHz Sensor 1000m range, 1.2m resolution	5.8GHz Sensor 600m range, 1.2m resolution
Detection Range	Human: 150m Vehicle/Boat: 150m	Human: 250m Vehicle/Boat: 250m	Human 400m Vehicle/Boat: 600m	Human: 800m Vehicle/Boat: 1000m	Human 400m Vehicle/Boat: 600m
Frequency	C-Band				
Sensor Type	High-resolution MIMO digital beam-forming				
Azimuth Coverage	120 °			100 °	
Elevation	30 °				
High-Range Accuracy	< 1m				
Azimuth Accuracy	1 °			0.7 °	
Scan Rate (Per Second)	~3		2		
Target Detection Speed (M/Sec)	0.3 - 30				
Dimensions	25cm X 15cm X 5.9cm / 9.8" X 5.8"X 2.3"			29cm X 30cm X 8cm /9.8"X 11.8" X 3.15"	
Power Consumption	48V, 3.5W			48V, 5W	
Operating Temperature (C °)	-40° - +85°				
Power Interface	PoE 802.3af (802.3at Type 1)				
Environmental Ratings	NEMA-6, IP67				
Weight (Kg/lb)	15Kg / 3.3lb			3Kg / 6.6lb	
Approvals/ Certifications	CE, FCC, UL, IC	FCC, UL, IC	FCC, UL, IC	FCC, UL, IC	CE/RED EN-62368 1:2014, EN-60950 22:2006 / AC:2008, EN 1-489 301, EN301

Accessory & Kit Technical Specifications

Tyco provides installation accessories for mounting the radar in different setups, including an RJ45 cable adapter. All the accessories are described in the table below and may be ordered together with the sensors. All accessories are compatible with any of Tyco sensors.

Sold only in EMEA region

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Ordering Information

Model	Description
TRADAR-150F	Tyco Radar Detection, 150m range, 5.8GHz sensor, 1.2m resolution
TRADAR-150C*	Tyco Radar Detection, 150m range, 5.8GHz sensor, 1.2m resolution
TRADAR-250F	Tyco Radar Detection, 250m range, 5.8GHz sensor, 1.2m resolution
TRADAR-500F	Tyco Radar Detection, 500m range, 5.8GHz sensor, 1.2m resolution
TRADAR-500C*	Tyco Radar Detection, 500m range, 5.8GHz sensor, 1.2m resolution
TRADAR-1000F	Tyco Radar Detection, 1000m range, 5.8GHz sensor, 1.2m resolution
TRADAR-2.5MCBL	Tyco Radar Detection, adapter cable, 2.5m (8.2ft)
TRADAR-15MCBL	Tyco Radar Detection, adapter cable, 15m (49ft)
TRADAR-MASS	Tyco Radar Detection, MASS Management Software
TRADAR-MASS-FO	Tyco Radar Detection, MASS Failover software license
TRADAR-MASS-PTZ	Tyco Radar Detection, One additional PTZ sensor integratio
TRADAR-UMOUNT	Tyco Radar Detection, Universal Mount Bracket

TRADAR-150C & 500C Sold only in EMEA
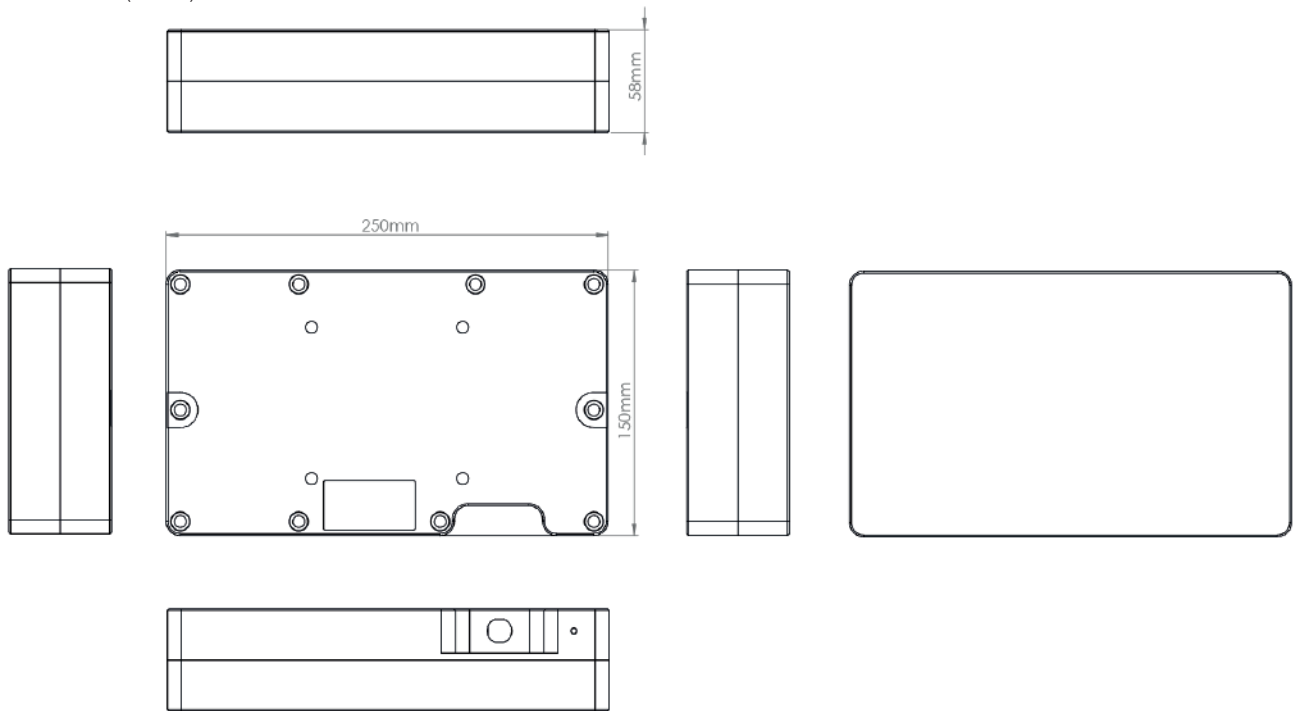
Radar Dimensions (in mm)

Figure 1: TRADAR-150F, 250F & 500F radar sensor outline drawing
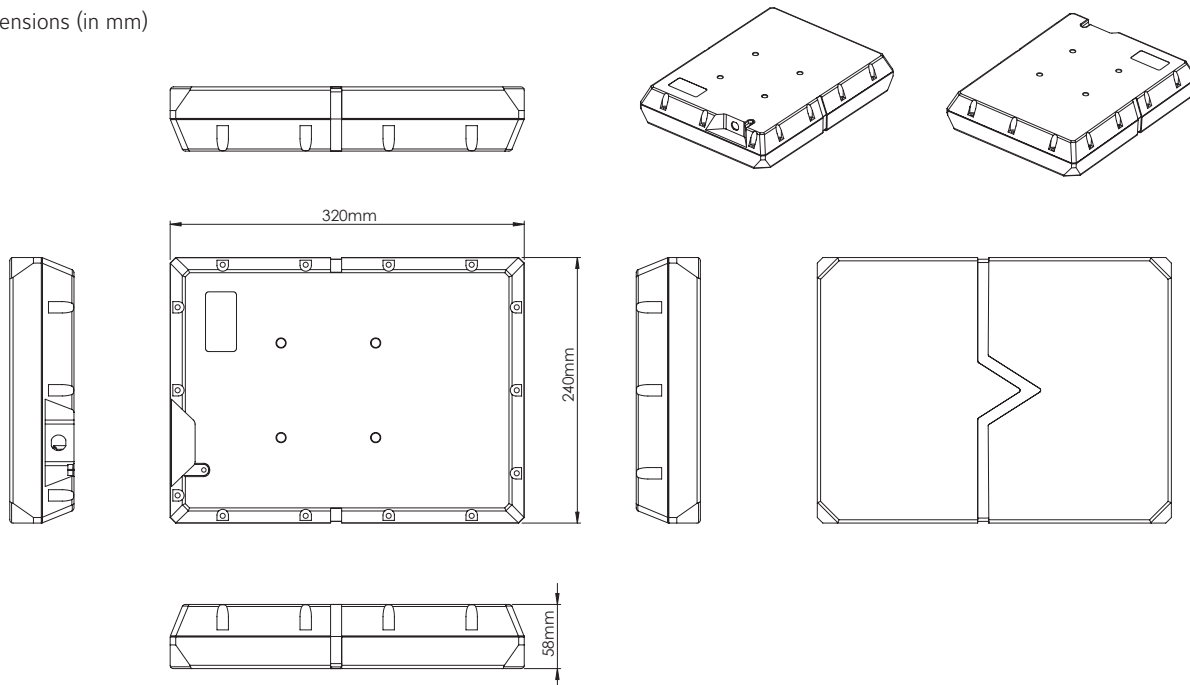
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Radar Dimensions (in mm)

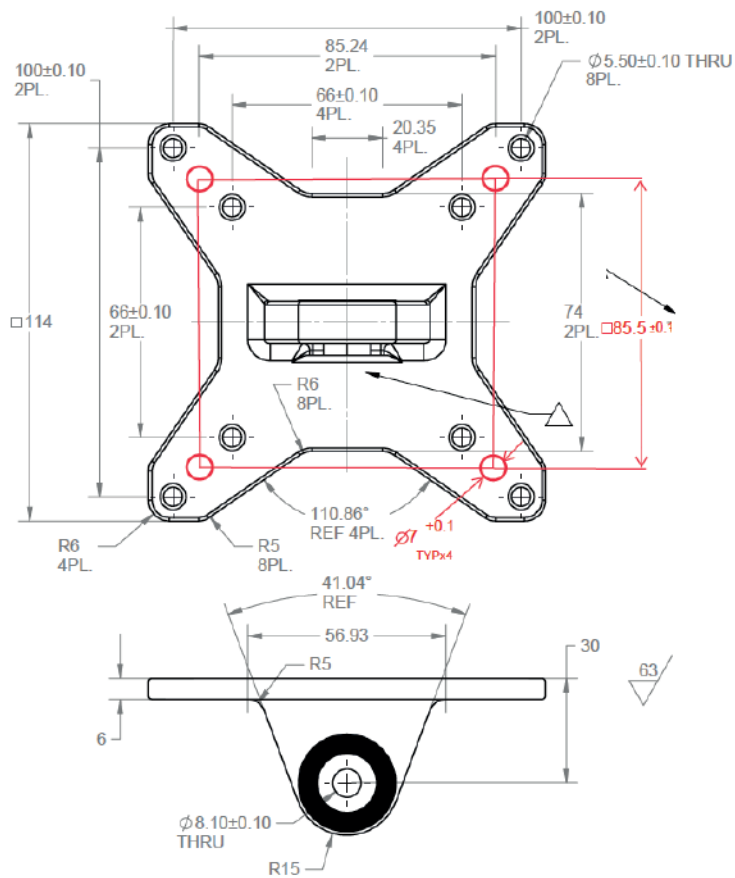Figure 2: TRADAR-1000F & Scepter-C radar sensor outline drawing

Figure 3: Universal mount adapter kit TRADAR-UMOUNT drawing

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