Extant®

AEROSPACE ➤➤➤

RANGE-R® 2D

Handheld, portable through-wall radar

Within seconds, Range-R® 2D displays the presence of moving and stationary persons, indicating the range (distance) and the position (bearing) of single and multiple targets in a plan view format. This vital intelligence helps assure safe and successful operation to military, law enforcement and search and rescue operations.
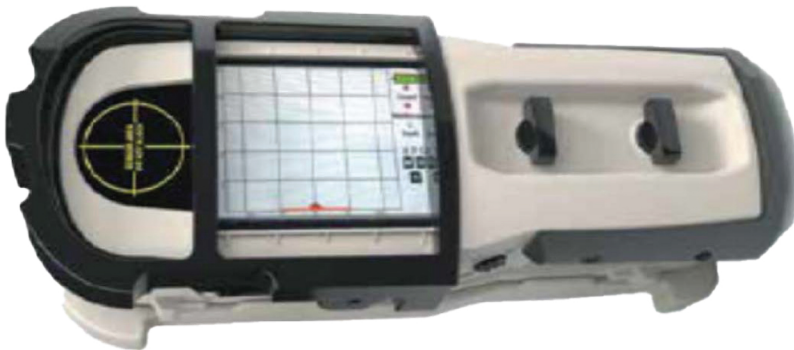
In real time, Range-R 2D locates moving and stationary persons. Its highly sensitive Doppler radar enables it to detect even just the slight movement from a person breathing, and Range-R 2D's patented backward-looking capability assures it performs with very low false alarm responses. The simple user interface, proprietary detection algorithms and rear-looking radar receiver offer best-in-class performance.

Hostage situations, stand-offs, natural disasters and burning buildings are just a few scenarios where Range-R 2D's through-wall technology can be utilized to locate persons hidden from view—without putting the lives of emergency responders in unnecessary danger. It enables police, SWAT, emergency medical teams, firefighters and other special operations teams to efficiently and effectively allocate their time and resources when split-second decisions must be made.

The system is designed to be operational from a breach or standoff location. Range-R 2D has a simple-to-use interface and a rotational, easy-to-read LCD display. Its compact design and light weight make it easy for users to integrate with their existing gear load.

A lightweight handheld radar system designed to detect people through walls and structural barriers made from concrete, brick, plaster with wire mesh, adobe and other common building materials.

APPLICATIONS

> Hostage recovery

> Tactical entry

> Search & Rescue

> Breaching operations

> Stowaway detection

Rotational LCD screen

Patented rearward-looking radar reduces false alarms

SPECIFICATIONS

Unique Features

Dimensions	11" x 4" x 4"	27.9 cm x 10.2 cm x 10.2 cm
Weight	3 lb, no batteries	1.36 kg, no batteries
Detection Range	65+ feet	20+ meters
Resolution	15.75"	40 cm
Field of View	180 / 90 degrees Azimuth	180 degrees in elevation
Waveform Type	Stepped-frequency continuous wave (SFCW)	
Bandwidth (BW)	3.1 – 3.5 GHz, 200 discrete frequency steps	
Output Power	32 mW	(+15 dBM)
Power Requirements	8 standard AA batteries (Primary or rechargeable) +12 VDC external power	

Environmental

Operating Temperature	-4°F to +122°F	-20°C to +50°C
Operating Time with Batteries (30 second scan, 3 minutes off cycle)	> 11 hours (Lithium L91) > 8 hours (NiMH) > 3 hours (alkaline)	

System Components

> Range-R 2D sensor

> Two sets of eight NiMH rechargeable batteries

> Battery charger with AC power adapter

> Training CD
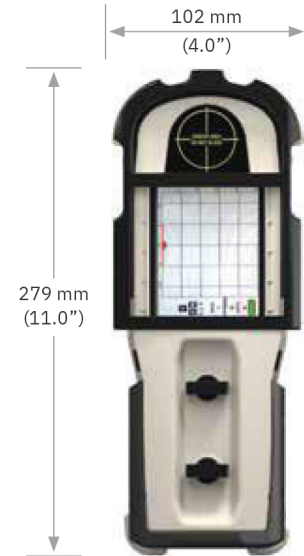
> Environmentally hardened carry case

Optional

> Range-R 2D Link (Tablet with Wi-Fi for remote operation)

Operational Standards

This device has received certification under the authority of the Federal Communications Commission (FCC).

Identifier:	YKD-25STW4100-019
Equipment Class:	Licensed non-broadcast station transmitter

102 mm (4.0")

279 mm (11.0")

RANGE-R 2D SYSTEM
Front Profile

102 mm (4.0")

RANGE-R 2D SYSTEM
Side Profile

Range-R® 2D

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