



HIGH DEFINITION MID-RANGE SURVEILLANCE SYSTEM

FLIR Ranger® HDC MR

The FLIR Ranger HDC MR sets a new standard for high definition perimeter security applications, border surveillance and force protection. With superior capability to detect illegal activities in any weather using built-in fog mode and heat turbulence filters, operators can quickly and accurately determine true threats from false alarms in any situation.

The HDC MR is not only a superior system in bad weather, it also provides increased uptime and reduces cyber risks – a reliable tool that adds days of efficient surveillance and reduces risk compared to previous generations of systems.

Geo-locate targets quickly with the Laser Range Finder option and change quickly from one scene to another with the fast and accurate pan-tilt.

Includes a high-definition thermal imager with either a 1280 x 720 cooled detector or a 1024 x 576 uncooled detector along with a 1920 x 1080 HD Color TV camera, and is designed for slew to cue integration with other sensors such as radars, making it ideal for C-UAS.

FEATURES

SEE MORE

Compared to any legacy standard resolution system, the Ranger HDC MR can capture a wider array of views with the same target resolution thanks to the high definition imagery.

EXTEND THE MISSION CAPABILITY IN BAD WEATHER

See through fog and haze with the fog filter and through turbulent air with the Merlin ASX turbulence filter.

ACT FASTER

Shorten the time between target detection and counter measures with higher resolution imagery for more accurate target classification.

INCREASE UPTIME

Significantly reduce downtime, maintenance and costs with the long-life core that more than doubles the MTBF of previous generations.

LOWER RISK

Protects against hackers with an industry leading cyber security tool that scans at each software release to ensure system is not vulnerable to attacks.

APPLICATIONS

BORDER SECURITY

COASTAL SURVEILLANCE

FORCE PROTECTION

INDUSTRIAL FACILITY

CRITICAL INFRASTRUCTURE SECURITY

AIR & SEA PORTS

COUNTER UAS APPLICATIONS

SPECIFICATIONS

High Definition Thermal Camera	Ranger HDC UC	Ranger HDC 350	Ranger HDC 550
Detector type	Micro-bolometer FPA: 1024x576	Indium Antimonide (InSb) 1280x720	
Spectral range	7.5 – 13.5 μm	3-5 μm	
Field-of-view	Narrow: 5.4°x3.1° $\pm 7\%$ 16:9 image format Wide: 16.8°x9.3° $\pm 7\%$ 16:9 image format	Narrow: 3.0°x1.7° $\pm 7\%$ 16:9 image format Wide: 38.0°x21.5° $\pm 7\%$ 16:9 image format	Narrow: 1.9°x1.08° $\pm 7\%$ 16:9 image format Wide: 24°x13.5° $\pm 7\%$ 16:9 image format
Focus	One shot Auto focus and Manual		
Continuous zoom options	Two optical Fields of View with seamlessly integrated digital zoom between Wide FOV and NFOV. Digital zoom: 16x	Optical zoom: >12x Digital zoom: 16x	
Image processing	FLIR Image Processing Engine with advanced Digital Detail Enhancement (ADE/DDE), Histogram equalization, Electronic image stabilization.		



High Definition Color TV Camera	
Sensor format	1920x1080 pixels
Focal length	4.3 mm (WIDE) to 129 mm (TELE)
F-number	F1.6 to F4.7
Narrow field-of-view	$\leq 2.3^\circ \times 1.3^\circ$ (digital video)
Wide field-of-view	$> 63^\circ \times 35^\circ$ (digital video)
Optical zoom	30x
Digital zoom	12x
Min. Sensitivity	0.1 lx High Sensitivity Mode Off 0.01 lx High Sensitivity Mode On
Focus	1.2 m to infinity
Fog mode	on/off

Pan & Tilt Unit	
Az Range; Az velocity	$\text{nx}360^\circ$; 0.08°/s - 120°/s
El Range; El velocity	$-35^\circ - +90^\circ$; 0.08°/s - 120°/s
Accuracy	± 0.5 mrad
Resolution	≤ 0.05 mrad
Parking position	Default transportation/Stand-by parking position in elevation

Image Presentation	
Video format	HD-SDI video output format: 1920x1080p29.97 YCbCr 4:2:2 according to SMPTE 274M carried over SMPTE 292M Ethernet video output format: H.264 carrying 1920x1080p29.97

Connectors	
Connectors	Power connector, type D38999 series III Main connector, type D38999 series III Ethernet connector, Amphenol RJFTV21ZN or similar

Options available	
Laser Range Finder (LRF)	Yes, optional: Mid range (10 km) or Short range (6 km)
Geo Positioning (GPS)	Yes, optional
Digital Magnetic Compass (DMC)	Yes, optional
Merlin ASX - Turbulence filter	Yes, optional (for both channels, select one video at a time)

AMERICAS

FLIR Systems, Inc.
Corporate Headquarters
1201 S. Joyce Street
Suite C006
Arlington, VA 22202
Office: +1 703.682.3400

FLIR Systems, Inc.
27700 SW Parkway Ave
Wilsonville, OR 97070
Office: +1 877.773.3547

EUROPE

FLIR Systems
2 Kings Hill Avenue - Kings Hill
West Malling, Kent ME19 4AQ
United Kingdom
Office: +44 (0)1732 220 011
Fax: +44 (0)1732 843 707

FLIR Systems AB
Antennvägen 6,
PO Box 737
SE-187 66 Täby
Sweden
Office: +46 (0)8 753 25 00

MIDDLE EAST

FLIR Systems B.V. - Abu Dhabi
Wadi Al Fey St.
Building 60, Office # 302
New Ministries Exit / Khalifa Park Area
Abu Dhabi, U.A.E.
Office: +971 2 666 1561
e-Fax: +1 503 914 1591

FLIR Systems Saudi Arabia
Office 127, First Floor
Akaria Plaza Building, Olaya Street
Riyadh, 11481, Saudi Arabia
Office: +966 11 464 5323
Fax: +966 11 464 0438

ASIA

FLIR Systems Japan K.K.
Meguro Tokyu Bldg. 5F,
2-13-17
Kami-Osaki, Shinagawa-ku.
Tokyo, 141-0021, Japan
Office: +81-3-6721-6648

For More Information contact
surveillance_sales@flir.com

www.flir.com
NASDAQ: FLIR

Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2021 FLIR Systems, Inc. All rights reserved. Revised 04/30/21

21-0100-SUR-RANGER-HDC-MR-
Specsheet-LTR



The World's Sixth Sense®