

RANGER HDC MS

High-Definition Long-Range Surveillance System

APPLICATIONS

BORDER SECURITY	INFRASTRUCTURE SECURITY
COASTAL SURVEILLANCE	AIR & SEA PORTS
FORCE PROTECTION	VEHICLE & MAN-PORTABLE CAPABILITIES
INDUSTRIAL FACILITY CRITICAL	



FLIR Ranger® HDC MS increases mission effectiveness, extending surveillance through darkness, distance, and especially when “bad weather is good smuggling weather.” This multisensor system integrates long-range, mid-wave thermal imaging with a variety of powerful daylight sensors, and optionally a laser range finder, GPS, digital magnetic compass, and automatic video tracker. Read ship names or license plates, or watch the scene from a safe standoff distance of up to and beyond the 15 km range.

Integrated fog and heat turbulence filters penetrate particulates and eliminate image distortion caused by atmospheric conditions. Pan-tilt 1280x720 HD MWIR and visible cameras with powerful continuous-zoom telescopes help detect and identify more targets from farther away. Ranger HDC MS assesses threats while discerning between nuisance alarms and those requiring interdiction for border, coastal surveillance, and force protection surveillance. Besides increasing the mission effectiveness in bad weather, it also helps forces act faster, increase uptime, and reduce cyber risks.

FEATURES

SEE MORE IN WIDE FORMAT

HD imagery captures twice as much of a scene compared to legacy standard resolution.

EXTEND MISSION CAPABILITY IN BAD WEATHER

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

ACT FASTER WITH HIGHER RESOLUTION IMAGERY

Shorten the time between target detection and counter measures with more comprehensive intel from HD details and a fast, accurate pan-tilt that's perfect for slew-to-cue applications.

INCREASE UPTIME AND REDUCE COSTS

New long-life core doubles uptime and significantly reduces the downtime, maintenance, and logistic costs compared to previous generations.

REDUCE CYBER RISK

A cyber security tool provides high resistance to hacker attacks that can compromise mission effectiveness.

SPECIFICATIONS

Thermal Imaging	Ranger HDC 800		Ranger HDC 1200	
Detector type	Indium Antimonide (InSb): 1280x720 pixels			
Spectral Range	3 – 5µm			
Field-of-view	1.35° (H) to 30° (H), (±7%), 16:9 format		0.92° (H) to 20.4° (H), (+/-7%), 16:9 format	
Continuous zoom	Optical zoom 22x, Digital zoom 16x			
Color TV	HD LR-TV 750/720	HD LR-TV 750/1080	HD LR-TV 1000/720	HD LR-TV 1000/1080
Sensor format	1/2" Color CCD, 1280 x 720 pixels	1/2" Color CMOS, 1920 x 1080 pixels	1/2" Color CCD, 1280 x 720 pixels	1/2" Color CMOS, 1920 x 1080 pixels
Focal length	12.5 – 750 mm 25 – 1500 mm with 2x extender		16.7 – 1000 mm 33.4 – 2000 mm with 2x extender	
Narrow field-of-view	(H) 0.54°, 0.27° with 2x extender	(H) 0.51°, 0.25° with 2x extender	(H) 0.4°, 0.2° with 2x extender	(H) 0.38°, 0.19° with 2x extender
Wide field-of-view	(H) 31.5°	(H) 29.6°	(H) 22.8°	(H) 22.4°
Optical zoom	60x, 120x with 2x extender			
Min sensitivity	3 lux	1 lux	3 lux, 0.5 lux @10Hz	1 lux, 0.17 lux @10Hz
Fog filter	no	no	yes	yes
Pan-tilt				
Az Range; Az velocity	n x 360°; 0.03° – 100° / sec continuous			
EI Range; EI velocity	± 90°; 0.03° – 100° / sec			
Accuracy	± 0.5 mrad			
Resolution	0.2 mrad			
Options				
LRF	Optionally available			
GPS	Optionally available			
DMC	Optionally available			
Merlin ASX Turbulence filter	Optionally available, for IR camera or Color camera or for both IR camera and Color camera			
Automatic Video tracker	Standard option			
Electronic image stabilization	Standard option			
Interfaces				
Ethernet	Command and control, all functions and h. 264 video			
Video out	2x HD SDI, and h.264			
4-wire RS-485 full duplex	Command and control all functions			
Power				
Input voltage	+31 VDC (operates between 18-32VDC)			


AMERICAS

27700 SW Parkway Ave
Wilsonville, OR 97070

EUROPE

2 Kings Hill Avenue - Kings Hill
West Malling, Kent ME19 4AQ
United Kingdom

Antennvägen 6,
PO Box 737
SE-187 66 Täby
Sweden

MIDDLE EAST

Wadi Al Fey St.
Building 60, Office # 302
New Ministries Exit /
Khalifa Park Area
Abu Dhabi, U.A.E.

Office 127, First Floor
Akaria Plaza Building, Olaya Street
Riyadh, 11481, Saudi Arabia

ASIA

Meguro Tokyu Bldg. 5F,
2-13-17
Kami-Osaki, Shinagawa-ku.
Tokyo, 141-0021, Japan

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited. For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com. ©2022 Teledyne FLIR LLC. All rights reserved.

Revised on 01/18/22
Ranger HDC-MS_Datasheet-A4 22-0118