SEAFLIR® 280-HDEP

Shipboard HD Multi-Spectral
Surveillance System

APPLICATIONS

ISR

WEAPON CONTROL

CUAS/CUSV

SECURITY

FORCE PROTECTION

SEARCH AND RESCUE



The SeaFLIR 280-HDEP is a high-performance maritime imaging system designed to identify and track smugglers, terrorists, or any other threat – day and night, and on the roughest seas.

With an all-new TFU design for improved reliability, the SeaFLIR 280-HDEP is ready for any maritime mission scenario. The modular and scalable control electronics unit is capable of hosting high-power video processing, which can support Aided Target Recognition (AiTR) via the Neural Network Target Classifier (NNTC). Optional Display Interface Boards (DIB) allow you to play up to four independent video streams, and removable terabyte hard drive w/DVR records over 80 hours of compressed video and 250 screen captures.

Qualified to MIL-STD-461 and MIL-STD-810, SeaFLIR 280-HDEP is designed for deployment in a variety of ISR, rescue, and interdiction operations. Multiple NIR and SWIR laser illuminator and pointer options light up targets for personnel with night vision capability.

FEATURES

MODULAR, SCALABLE COMPUTING POWER

Optional high performance COTS COM Express computing and Graphical Processor Unit for advanced image processing and support of third-party algorithms.

AIDED TARGET RECOGNITION (AITR)

Capability of hosting the FLIR Neural Network Target Classifier (NNTC). NNTC target libraries will continually evolve based on new threats and mission challenges.

ALL-WEATHER, SEA-READY

Designed for 24/7/365 maritime duty, SeaFLIR 280-HDEP provides long-range target detection, identification, and tracking.

MISSION FLEXIBILITY

SeaFLIR 280-HDEP provides long-range mission support for ISR, interdiction, EEZ constabulary, maritime SAR, covert OPS, man overboard search and track, and disaster recovery.

RELIABILITY

Designed to MIL-STDs, brushless high torque motors, robust heat dissipation, power conditioning circuits and high reliability MWIR cooler are some of the notable features of this highly dependable system.

TELEDYNE FLIR

SPECIFICATIONS

Thermal Imager	
Sensor type	1280x720 InSb FPA
Wavelength	3-5 µm
FOVs	Optical: 40°-2° continuous (20X) 4X E-Zoom: 0.5°
Daylight Camera	
Sensor type	1920x1080 CCD
FOVs	Optical: 50° to 1.5° (36X effective) 3X E-Zoom: 0.5°
Low Light Camera	
Sensor type	1280x720 sCMOS
FOVs	Optical: 50° to 1.4° (37X effective) 3X E-Zoom: 0.5°
Spotter Scope (Option)	
Sensor type	1920x1080 CCD or 640x480 SWIR
FOVs	CCD: 29.9°, 4.83°, 0.92°, 0.51° (0.25° w/2X E-Zoom) SWIR: 30.0°, 4.6°, 0.9°, 0.5° (0.28° w/2X E-Zoom)
Laser Payloads	
Rangefinder (Option)	Max Range: 30 km Classification: Class 1
Illuminator (Option)	Power: 1W SWIR Classification: Class 4
Pointer (Option)	Power: 150 mW Classification: Class 3b
System Performance	
System type	Gyro stabilized Turret w/ separate Control Electronics Unit
Az. coverage	360° continuous
System Interfaces	
Digital video	SMPTE 292M/HDMI/Optional H.264 video over Ethernet (requires Vision Processor)/programmable independent video outputs (2 independent video outputs standard. 2 additional outputs with optional 2nd display interface board)
Analog video	NTSC
Control	RS-232, RS-422
Data	Gig-E, CAN Bus, RS-232, RS-422
Computing Resources & Processing	
Vision Processor - COTS COM Express Type 6 form factor (optional)	
GPU Co-Processor (optional)	
1TB removable hard drive for video storage (snapshot and motion) (optional)	
Internal 1 channel DVR (optional) (requires Vision Processor Option)	

Environmental	
Standards	MIL-STD-810, MIL-STD-461
Operating temperature	-40°C to 55°C
Power Requirements	
Voltage	18 – 32 VDC (per MIL-STD-704E)
Consumption (steady state)	TFU - 295 W typ., 600 W max (excluding anti-icing) CEU – 295 W typ., 370 W max (CPU/GPU model)
Anti-Ice	Additional 374 W/15.6 AMPS
Dimensions & Weight	
TFU size	14.25"(d) x 16"(h) (362 x 406mm) cylindrical volume
TFU weight	</= 60.2 lbs (27.3kg) (varies based on payloads)
CEU size	12.3 w x 14.6 d x 7.3 h (312 x 371 x 185mm)
CEU weight	</= 31 lbs (14.1kg) (varies based on payloads)
Other Options & Accessories	
Displays, video processing algorithms	









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Revised on 04/18/24
SeaFLIR 280-HDEP_Datasheet-LTR 23-0525