



HX-IDS-MS-110

MEDIUM-RANGE
MULTISPECTRAL HANDHELD CAMERA



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HEXIUM Technical Development Co., Ltd., the specialist of unique devices, has developed the **HX-IDS-MS** product family for supporting professional defensive and safety applications. This device contains our engineers' more than 30 years of experience in infrared imaging; the most modern sensor technology used in Space*; the powerful DaVinci processor; a user-friendly software and moreover an easy to use mechanical construction.

The **HX-IDS-MS** devices can be used for military purposes, police, border surveillance and military reconnaissance also.

The integrated thermal camera is designed for use in harsh weather environments and operates in extreme light conditions. The technology provides the ability to detect, recognise, identify target and define its position through at night or even in foggy conditions. According to our experience the thermal imaging camera can help finding people even at daylight when they are hiding in the bush or in the woods.

Visible range colour imaging camera with parallel optical axis produces ultra-sharp images even from a distance of several kilometres. The 35x focus distance zoom optic supports detection during day time even with display of the images of the thermal imaging camera (optional). Due to extending visible wavelength the camera can produce high quality images (by extending visible wavelength) even in half-light.

The laser range finder (LRF) with parallel optical axis for 5.000m can detect exact position of the target. Its laser diode meets the international eye safety standards.

The three axis digital magnetic compass, which can be built in as an optional accessory, with the LRF and GPS belonging to the basic facilities can detect the GPS coordinates of the measured object in order to display it on the optional digital map.

The device can record one hour continuous video stream by either daylight or thermal camera and both

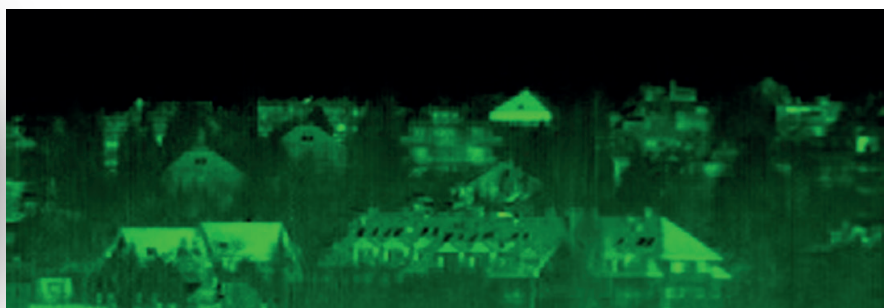


can record hundreds of images. The biocular finder can be adjustable to the user's eyes and equipped with an eyecup.

HX-IDS-MS camera is designed for use in harsh weather conditions and is equipped with cover and interface which meet the international standards. The exchangeable military category battery operates up to 4 hours.

Accessories are a carrying bag designed for use in harsh environmental conditions with power supply adaptor (230VAC) and cigarette lighter adaptor, a backup battery, cleaning equipment and a user guide.

The camera can be mounted on a standard tripod.



Options

Tripod, WLAN module, GPRS/3G module, DMC (Digital Magnetic Compass) module and 7" display image storage external unit.

FEATURES

Uncooled thermal camera (7 μ m - 14 μ m)

Daylight camera (35x zoom)

Laser Range Finder (max. 5.000m)

Embedded GPS

Optional DMC (Digital Magnetic Compass)

Optional WLAN

MPEG-4 streaming

Videorecording (> 1hour)

Image recording (> 100 frame)

Biocular structure

IP65

Tripod adaptor



HX-IDS-MS-110 TECHNICAL SHEET



THERMAL CAMERA

SPECTRAL BAND	7µm - 14µm
SENSOR TYPE	Uncooled aSi FPA
RESOLUTION / PIXEL SIZE	384 x 288 pixel / 25µm x 25µm
NETD	< 50mK
MOTORIZED OPTICS	Ge+AR; f=75mm; F1.0
FOV (HOR x VER)	7.3° x 5.5°
DETECTIVITY (human: 0,6m x 1,7m) according to NATO STANAG	> 1200m
DETECTIVITY (vehicle: 2,3m x 2,3m) according to NATO STANAG	> 2300m

DAY & NIGHT COLOR CAMERA

SPECTRAL BAND	380nm – 780nm/1000nm
SENSOR TYPE	1/4 inch Super HAD CCD
RESOLUTION / PIXEL SIZE	768 x 576 pixel (440.000 pixels)
SENSITIVITY	0.50lux (1/50s); 0.01lux (1/3s & ICR off)
MOTORIZED OPTICS	35x optical zoom, f= 3.4mm...119mm; F1.4...F4.2
FOV (HOR x VER)	1.7° x 1.3°....55.8° x 41.9°
DETECTIVITY (human: 0,6m x 1,7m) according to Johnson criteria	> 3000m
DETECTIVITY (vehicle: 2,3m x 2,3m) according to Johnson criteria	> 5000m

LASER RANGE FINDER (LRF)

MEASURING RANGE	10m...5000m
TYPICAL MEASURING RANGE	1.0m x 1.0m; 10% albedo; VN=10km; 0.5s) 1350m
TYPICAL MEASURING RANGE	2.3m x 2.3m; 30% albedo; VN=10km; 1.0s) 2700m
LASER TYPE / WAVELENGTH	Diode Laser / 1.55µm
SECURITY	Class 1 (EN 60825-1:2007)

GPS

CHANNEL	GPS & QZSS L1 C/A, GLONASS L1OF	56
ACCURACY	2.5 m CEP; 5.0 m SEP	
SENSITIVITY	(with inside active antenna) -162dBm	
STARTUP TIME	(cold start)	30s

DIGITAL MAGNETIC COMPASS (OPTIONAL)

HORIZONTAL	(1δ)	360° / ±1.0°
PITCH, ROLL	(1δ)	±80° / ±0.5°

WLAN (OPTIONAL)

STANDARD	IEEE 802.11b/g
FREQUENCY	2.4GHz
BIT RATE	11Mbit/s, 54Mbit/s
RANGE	max. 1000m

GENERAL FEATURES

STARTUP TIME	<60s
VIDEORECORDING	>1 h
IMAGE RECORDING	>100 frame
WORKING TIME	>4 h
WORKING TEMPERATURE	-20°C...40°C
POWER	230V AC, 12V DC
MASS	<3.5kg

GUARANTEE

GUARANTEE	2 years
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