



# CYCLOPS (HX-IDS-MS-307-M)

MILITARY DESIGN HANDHELD MONOCULAR THERMAL CAMERA



# TECHNICAL DATASHEET

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#### THERMAL CAMERA

SPECTRAL BAND	7 $\mu$ m - 14 $\mu$ m	
SENSOR TYPE	Uncooled aSi FPA	
RESOLUTION / PIXEL SIZE	640 x 480 pixel / 17 $\mu$ m x 17 $\mu$ m	
NETD	< 40mK	
MANUAL OPTICS	Ge+AR; f=75mm; F1.0	
FOV (HOR X VER)	8.3° x 6.2°	
ZOOM	x2, x4	
DETECTIVITY (human: 1,7m x 0,6m)	moving	2200m
DETECTIVITY (vehicle: 2,3m x 2,3m)	according to NATO STANAG	5000m

#### DISPLAY

TYPE	monocular	color OLED
RESOLUTION	800x600	

#### DIGITAL MAGNETIC COMPASS

HORIZONTAL DIRECTION / PRECISION	(1 $\sigma$ )	360° / $\pm$ 2.5°
PITCH, ROLL	(1 $\sigma$ )	$\pm$ 90° / $\pm$ 2.5°

#### GPS (OPTIONAL)

NUMBER OF SATELLITES	GPS & QZSS L1 C/A, GLONASS L1OF	56
ACCURACY	2.5 m CEP; 5.0 m SEP	
SENSITIVITY	(with internal active antenna) -158dBm	
STARTUP TIME	(cold start)	30s

#### WLAN (OPTIONAL)

WIRELESS STANDARDS	IEEE 802.11b/g	
FREQUENCY	2.4GHz	
SIGNAL RATE (UP TO)	11Mbps, 54Mbit/s	
RANGE	10m (highly dependent on environment)	

#### GENERAL FEATURES

STARTUP TIME	<45s	
BATTERY OPERATING TIME	>6 h (rechargeable) / >8 h (primary)	
OPERATING TEMPERATURE RANGE	-20°C...55°C (with rechargeable batteries) / -30°C...55°C	
POWER	Primary or rechargeable batteries	
WEIGHT	(with batteries) <1.6kg	
COLOR	black, green, sand	
DEGREE OF PROTECTION	IP65 / IP67 (in carrying case)	

#### MIL-STD 810 ADEQUACY

HIGH TEMPERATURE	Method 501.5 Procedure III
LOW TEMPERATURE	Method 502.5 Procedure II
TEMPERATURE SHOCK	Method 503.5 Procedure I-A
HUMIDITY	Method 507.5 Procedure I – Natural Cycles
RANDOM VIBRATION	Method 514.6
SHOCK	Method 516.6

#### BATTERY CHARGER (OPTIONAL)

##### HX-CHARGER-LI-DUAL

CHARGING CURRENT	500mA / 1000mA / 2000mA
POWER INPUT	230VAC / 12VDC ((cigar lighter socket)

##### EXTERNAL POWER CONNECTOR (OPTIONAL)

POWER INPUT	6VDC...16VDC
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#### ACCESSORIES

##### CARRYING CASE

COLOR	black, green, sand
DEGREE OF PROTECTION	IP67

##### TRIPOD

WEIGHT (WITH BALLHEAD)	cca. 1kg
MAXIMUM LOAD	4kg

##### CLEANING KIT

BLOWER BRUSH, CLEANING SOLUTION, COTTON BUD, WIPE CLOTH, WIPE PAPER

##### DOCUMENTATION

OPERATION AND MAINTENANCE MANUAL, CERTIFICATE OF CONFORMITY, TECHNICAL DATASHEET

#### RECHARGEABLE BATTERIES (OPTIONAL)

TYPE	Rechargeable battery 25500 Li-ion with PCB
TRUSTFIRE TF25500	3,7V (4000mAh)
O. T. RANGE	CHARGING: 0°C...+45°C / DISCHARGING: -20°C...+60°C

#### GUARANTEE

GUARANTEE	2 years (excludes batteries)
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