



Bordercam 225

UNCOOLED ELECTRO-OPTICAL CAMERA SYSTEM

The Bordercam-225 Enhanced is a market-leading mid-range dual-sensor electro-optical surveillance system. This unique system combines an advanced high-resolution uncooled continuous zoom thermal camera with a mid-range daylight camera on an accurate pan-tilt unit.

The Bordercam-225 Enhanced offers best in its class detection and recognition without the required regular maintenance, ensuring low cost of ownership. Typical applications for this system include fixed installation, vehicle integration or man portable operation for forward observation, surveying borders, airports, refineries, power plants, and other sensitive installations.

This camera is integrated with ADAMS Sensor Management System. The Ethernet interface makes it easy to integrate into third party systems as well.

BENEFITS

✔ **Dual Continuous Zoom Channels (Thermal & Color)**

Independent continuous zoom thermal and color cameras provide maximum situational awareness, user friendliness, and 24/7 threat assessment.

✔ **Mid-Range Thermal Imagers**

Uncooled thermal cameras provide mid-range performance without routine preventive maintenance and without the noise of the cooler.

✔ **Ruggedized for Harsh Environments**

A rugged design, certified to IP67, and protected against dusty, and other harsh or industrial environments.

✔ **Easy Integration**

TCP/IP interface, proprietary protocol

SPECIFICATION

✔ **Thermal Imager:**

1280x1024 uncooled VOx microbolometer

✔ **Daylight Imager**

Resolution: 2464X2056; global shutter color 2/3" CMOS max 12x digital zoom

✔ **Weight of the camera unit:**

(daylight camera + thermal camera + PTU)
25 kg

✔ **GPS & Compass** Unit optional

✔ **Thermal Optics:**

LWIR (8-14 um)
9x continuous optical + 4x digital zoom

✔ **Daylight Optics:**

20x continuous optical + 12x digital zoom

✔ **Video Streaming (TCP/IP):**

Multiple independent video streams,
RTSP output format
Encoding in H.264, or MJPEG

SPECIFICATIONS

UNCOOLED THERMAL CAMERA SPECIFICATION	
sensor type	uncooled VOx microbolometer
spectral response	LWIR (8-14um)
pixelpitch size	12um
resolution	1280x1024 pixel
NETD	<50mK
lens type	motorized continuous zoom and focus
optical zoom	9x
horizontal angle of view	34.8-3.85° (optical)
digital zoom	4x
DRI ranges	2500 m (identification 1.8x0.6m human 12x4px) 3500 m (identification 2.3x2.3m NATO 12x12px) 5000 m (recognition 1.8x0.6m human 6x2px) 7000 m (recognition 2.3x2.3m NATO 6x6px) 10000 m (detection 1.8x0.6m human 3x1px) 20000 m (detection 2.3x2.3m NATO 2x2px)"
image processing	digital stabilization, auto NUC, colorpalettes (whitehot, black-hot)
Situation Awareness Capability	Movement recognition function - on /off

GENERAL

working temperature range	-30...+50°C
storage temperature range	-40...+65°C
power requirement	24VDC, Thermal 45W; Daylight 55W; PTU 250W (typical) Heater 80W (optional)
interface	Gbit Ethernet
video format	MJPEG/h.264/RTSP
sealing	IP67

FHD DAYLIGHT CAMERA SPECIFICATION	
sensor type	global shutter 2/3" CMOS
resolution	max.2464x2056
dynamic range	71dB
optical zoom	20x
digital zoom	12x
horizontal angle of view	38.6-2.05° (optical)
DRI ranges	8000 m (identification 1.8x0.6m human 12x4px) 10000 m (identification 2.3x2.3m NATO 12x12px) >16000 m (recognition 1.8x0.5m human 6x2px) >20000 m (recognition 2.3x2.3m NATO 6x6px)" >30000 m (detection 1.8x0.5m human 3x1px) >30000 m (detection 2.3x2.3m NATO 2x2px)"
image processing	digital stabilization, AF, AE, AWB

PAN AND TILT UNIT

pan range	∞ x 360°
tilt range	-45...+45°
pan angular speed	0.029 ... 70 °/s
tilt angular speed	0.019 ... 28.6 °/s
positioning accuracy	<0.25 mrad
resolution	0.012 mrad

LRF SPECIFICATION

measuring range	50-15000m
accuracy	+/- 1m
multiple targets detection	max 5 targets / measurement
eye safety	Class 1

DRI ranges have been determined without taking into account the atmospheric conditions.

The actual picture on this brochure is only illustration.

Optional use of teleconverter can affect the DRI and FOI values

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Pro Patria Electronics
Konyves Kalman krt 12-14
H-1097 Budapest, Hungary
Tel +36 1 322 7010
Fax +36 1 344 7020
Web: www.propatria-inc.com