

TiCAM[®] 750

Thermal Imaging Binoculars



Military • Search & Rescue • Border Security • Marine Surveillance • Wildlife Monitoring • Police

Thermal Night Vision

 **Thermoteknix**
Systems Ltd

TiCAM® 750 - Thermal Imaging Binoculars

Handheld Thermal Imaging

TiCAM® 750 is a medium-range Military Specification handheld thermal imager for military and civilian applications including special forces, search & rescue, police, border security, target acquisition, counter drug operations, park rangers monitoring wildlife/illegal game hunters, VIP protection and for general situational awareness. TiCAM will detect a man at over 2 kilometres. Two models are available: TiCAM 750MR (Medium Range) is based on a Thermoteknix MicroCAM 384x288 25µ pitch detector. TiCAM 750LR (Long Range) features a higher resolution 640x480 detector with 17µ pitch.

Waterproof - Rugged - Reliable

TiCAM 750's ergonomic clamshell design with rubber over-moulding is waterproof, floats and protects the camera in the harshest of environments and allows operation with or without gloves. The combination of TiCAM's class-leading MicroCAM® thermal imaging core and high-end germanium 75mm lens with diamond-like coating delivers the sharpest imagery in a supertough package. Functions include electronic focus & digital zoom, edge detection, Digital Magnetic Compass, GPS, external video output and up to 8 hours operation in normal use from 4 x AA rechargeable batteries.



x2 Optical Range Extender

The range extender quickly and easily attaches to the front of TiCAM via a bayonet attachment. This optical add-on doubles the focal length of TiCAM to 150mm for increased Detection, Recognition and Identification (DRI) performance. The range extender is compatible and interchangeable with both the Medium and Long range models.



Record

TiCAM records up to 11 hours of high quality video (48 hours on lower resolution), or over 60,000 still images. The data is simply downloaded to PC using TiCAM Sync software supplied with the video record option. This allows the images to be viewed and then deleted from the TiCAM as necessary or downloaded onto a USB memory stick. The unit also has external power input and a standard BNC video which can be connected to an auxiliary third party screen recorder.



TiCAM Remote Control Software

TiCAM Remote Control software enables full remote PC control of the camera and all its functions via cable (up to 5m with USB or 20m with RS232). With USB, live video is displayed and can be recorded direct to a PC hard disk.

TiCAM® 750



 GPS

 Laser Pointer

 Black / White Hot

 Manual / Auto Gain

 Digital Magnetic Compass

 Hard Carbon Protective Coating

 4 AA Battery Powered (Rechargeable)

TiCAM 750 Features Overview



 Video Record

 Edge Enhance

 Range Finder Reticule

 Waterproof and floats

 Digital Zoom

 PC Connectivity/ Remote Control

 USB Data Download

TiCAM Internal Menu Overlays

TiCAM 750's screen overlays display clear, accurate information and provide instant access to camera status. These include battery level, zoom position, range finder (man distance measurement) reticle, focus, gain mode, polarity, record options, reticle, GPS and DMC readings, image enhancement and any external connectors in use. All this information is recorded within every image/video sequence for later retrieval.

TiCAM 750

Thermoteknix TiCAM 750 is designed for demanding use by surveillance professionals. Whether for covert operations, search and rescue or identifying poachers in a game reserve, TiCAM 750 delivers the highest quality thermal imagery with an array of features in a high spec package.



Range Finder Reticule Overlay (Metres)

TiCAM[®] 750

State-of-the-art TiCAM 750

Detector (Uncooled)	Amorphous Silicon Microbolometer: TiCAM 750MR - 384 x 288 25µ pitch, 7.5-14µ TiCAM 750LR - 640 x 480 17µ pitch, 7.5-14µ
Instant On	Power on Time < 3 seconds
Battery Life	Up to 8 Hours Operation
Export Control	Subject to UK/EU Regulation Not subject to US ITAR Regulation
Display Modes	Standby/Covert mode
Tripod Mount	1/4" - 20

System Characteristics

Lens Size	75mm f/1.0
Operation Distance	5m to Infinity
NETD	<60 mK
MTBF	>20,000 Hours (Calculated)

Physical Characteristics

Size (excluding eye shade)	L:280mm, H:110mm, W:170mm
Weight	2.06kg inc. batteries, GPS, DMC & video record
Colour	Black
Anti-shock Protection	Rubber Over-moulding Armour
Lens coatings	Hard Carbon Protective Coating
Lens Cap	Hinged Integral Lens Cap
Eye Shade	Compatible with goggles

Electrical Characteristics

Battery Size	4 x AA Lithium Primary (as standard) Optional 4 x AA NiMH rechargeable (variable duration)
TV Video	MR Model: 50Hz Monochrome PAL (CCIR) standard LR Model: 60Hz Monochrome NTSC (EIA 'RS-170')
Video Output	Yes, Composite 1V peak to peak
External Interface Connector	RS232 / Video Out / Power In

Controls

Power	On/Off
Focus Mechanism	Electronic
Polarity	White Hot/Black Hot
Electronic Zoom	x1, x2, x4
Gain/Contrast	Auto/Manual Range
Image Enhancement (Edge Detect)	On/Off
Display Graphics	Battery Status/Gain Mode/ Polarity/Zoom/Reticule

Display Characteristics

Type	Dual OLED 800x600 pixels
Eye-piece Adjustments	Dioptr Adjustment -4 to +2 Dioptres
OLED Brightness Modes	High / Low / Covert

Environmental Characteristics

Low Temperature Operation	MIL-STD-810F: Method 502.4: Procedure II
High Temperature Operation	MIL-STD-810F: Method 501.4: Procedure II
Immersion	MIL-STD-810F: Method 512.4: Procedure I
Random Vibration	MIL-STD-810F: Method 514.5: Procedure I
Transit Drop	MIL-STD-810F: Method 516.5: Procedure IV

Optional Features

Built-In GPS L1 Commercial Frequency - Location Accuracy ± 2.5m geographic or military grid co-ordinates UTM or MGRS (user selectable)

Built-In Digital Magnetic Compass

3 Axis Sensors
Heading - Magnetic North - Bearing & Elevation
On Screen Display - On/Off

Built-In Record Video Facility

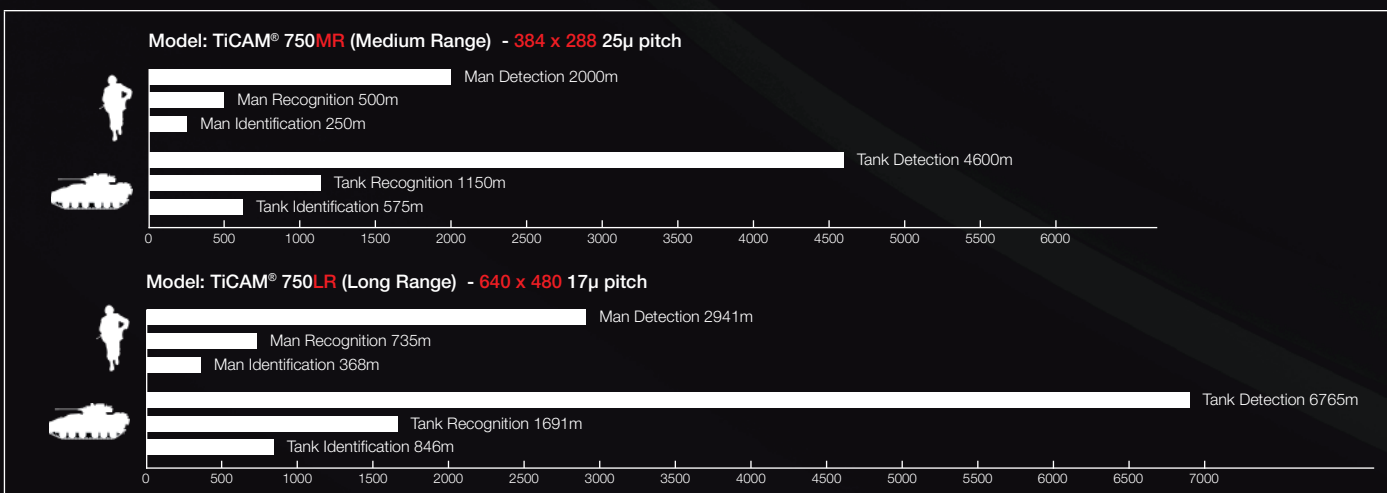
Up to 11 hours intermittent/continuous recording in MPEG-4 Part 2 (MPEG-4 Visual) SP format saved to 16GB internal memory

Laser Target Marker - 650nm (visible) or 850nm (night vision detectable)

Remote Control: TiCAM Remote Control Software

Range Extender Optics - x2 Telephoto (150mm f/1.3)

Detection, Recognition and Identification - DRI (Based on Johnson Criteria)



NOTE: The x2 Optical Range Extender Accessory doubles the focal length of TiCAM to 150mm with significant increase in Detection, Identification and Recognition distances shown in the tables above.

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UK Head Office:

Teknix House, 2 Pembroke Avenue
Waterbeach, Cambridge, CB25 9QR, UK
Tel: +44 (0)1223 204000 Fax: +44 (0)1223 204010
Web: www.thermoteknix.com Email: sales@thermoteknix.com



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Systems Ltd