

# **Technical Specifications**MOBOTIX M16B Thermal M16B Thermal TR



### Twice As Secure. Even In Total Darkness.

The intelligent video system with an integrated high-performance thermal image sensor takes full advantage of the M16B camera design. Thanks to the two directly adjacent lenses, there is also a thermal overlay function with image overlay (thermal and optical) to pinpoint the exact location of hotspots like smoldering fires in a visible image. The MOBOTIX TR cameras feature a calibrated thermal image sensor. Thermal radiation measurements made across the entire image area can be used to trigger an event based on the temperature increasing above or decreasing below an individually set trigger level (camera alarm, network message, activation of a signal output etc.).

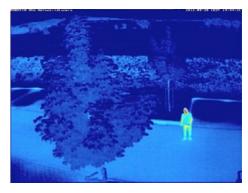
- Mx6 system platform 2nd generation, with MxBus, H.264 and ONVIF compatibility
- Fixed premium thermal image sensor with an NETD of 50 mK
- Thermal Radiometry For measurable added value: calibrated thermal image sensor
- Thermal field of view: 45°, 25° or 17°
- Additional image sensor module options
- Recording on an internal MicroSD card (4GB as standard)
- Integrated microphone and speaker
- MxActivitySensor can also be used in total darkness
- PoE thermal camera with a power consumption of < 10 W



### **General Product Information**

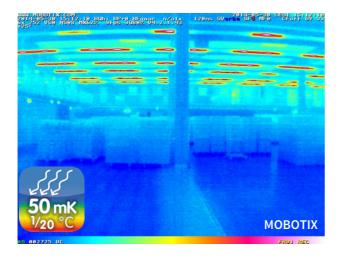
### Basic Information On Thermal Imaging Technology

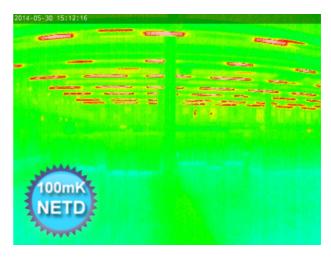
Thermal imaging technology is a contactless imaging procedure that makes it possible to see the thermal radiation from an object or body otherwise invisible to the human eye (mid-wavelength infrared). Thermal radiation is electromagnetic radiation emitted by a body based on its temperature. It is caused by thermal motion within a body's molecules. This is the result of accelerated charges that emit radiation in accordance with the laws of electrodynamics. Thermal imaging technology captures and displays temperature distribution across surfaces and objects. Thermographic cameras usually display heat intensity information in artificial colors (blue = cooler, red =



warmer). In terms of the number of pixels, the resolution is considerably lower than that for cameras capturing the visible spectral range.

Unlike cameras with optical image sensors, one of the decisive quality criteria for a thermal camera is the camera's ability to capture the slightest differences in temperature and to produce an image that displays these differences in colors. The NETD, or Noise Equivalent Temperature Difference, is used to measure the sensitivity of a thermal sensor and is expressed in millikelvin. With an NETD of 50 mK, MOBOTIX thermal cameras can visualize temperature variations starting at 0.05°C, which places them in the top range of cameras currently available for general use.





Thanks to an NETD of 50 mK, the MOBOTIX thermal image (left) shows significantly more details than a competitor's less powerful thermographic camera with an NETD of 100 mK (right).

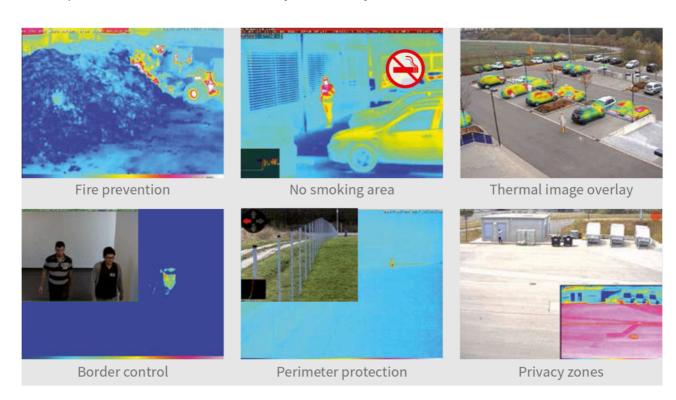
# **Respecting Privacy**

The detected thermal profile of a thermal camera shows no identifiable details for identification of persons and can therefore guarantee privacy. As soon as an object is moving into the relevant surveillance area, MOBOTIX dual camera system can automatically switch from thermal sensor to the optical sensor, producing visible high resolution video. This unique MOBOTIX feature combines two aspects, respecting the privacy aspect and at the same time optimal video surveillance.



## **Temperature Events And Thermal Overlay**

Thermal radiometry (TR) cameras from MOBOTIX generate automatic alarms, defined by temperature limits or temperature ranges, which is vital to detect potential fire or heat sources. Up to 20 different temperature triggers can be defined at the same time within so-called TR (Thermal Radiometry) windows or the whole sensor image can be used over the temperature range of -40 to +550 °C. In this way critical situations can be analyzed in the control room in order to plan the next steps for effective fire prevention. Critical assets like emergency generators, wind turbines or radio stations can be cost-effectively maintained and tested remotely. MOBOTIX thermal dual camera systems offer thermal overlay to localize so-called hot spots in the visual image to prevent larger damage. The standard Power-over-Ethernet (PoE) compatibility and the extremely low power consumption of only 6 watts allows operation of MOBOTIX thermal camera systems in every situation.



### PLEASE NOTE - Special Export Regulations For Thermographic Cameras

Cameras with thermographic image sensors ("thermographic cameras") are subject to special U.S. and ITAR (International Traffic in Arms Regulation) export regulations:

According to currently valid export regulations from the U.S. and ITAR, cameras with thermographic image sensors or their component parts cannot be exported to countries that have been embargoed by the U.S./ITAR. The corresponding delivery ban also applies to all individuals and institutions included on "The Denied Persons List" (see www.bis.doc.gov under Policy Guidance > Lists of Parties of Concern). These cameras and their installed thermographic image sensors are not to be used for the design, development, or production of nuclear, biological or chemical weapons or installed in these systems.

Link to the Thermal End User Statement on MOBOTIX Website



Camera Variants	M16B Thermal	M16B Thermal TR
Specialties	IP Thermografic camera with/without Thermal Radiometry technology (TR) and Germanium lens (3 different image angles available); can be optionally equipped with a second optical 6MP sensor module (day/color or night/black and white to be ordered separately for easy self-assembly)	
Main Differences	Temperature measurement only in the center of the image (Thermal Spot, 2x2 pixels), accuracy up to +/- 20°C	TR temperature measurement of each pixel in the whole image area, up to 20 independant temperature events, accuracy up to +/-10°C
Thermal Lenses/Sensors, 50 mK, 336 x 252 (Factory-Assembled)	M16B Thermal	M16B Thermal TR
Thermal sensor, horiz./vert. image angle 45°/32	Mx-M16TB-T079	+
Thermal sensor, horiz./vert. image angle 25°/19°	Mx-M16TB-T119	-
Thermal sensor, horiz./vert. image angle 17°/13°	Mx-M16TB-T237	÷
Calibrated Thermal sensor TR/Thermal Radiometry, horiz./vert. image angle $45^{\circ}\!/32$	-	Mx-M16TB-R079
Calibrated Thermal sensor TR/Thermal Radiometry, horiz./vert. image angle $25^{\circ}\!/19^{\circ}$	-	Mx-M16TB-R119
Calibrated Thermal sensor TR/Thermal Radiometry, horiz./vert. image angle $17^{\circ}/13^{\circ}$	-	Mx-M16TB-R237
Thermal image sensor	Uncooled microbolometer, 336 x 252 pixels, Pixel Pitch 17 $\mu$ m, IR range 7,5 to 13,5 $\mu$ m	
Sensitivity NETD (thermal resolution)	Typ. 50 mK, < 79 mK (50 mK is equal to temperature changes of 0,05°C)	
Thermal image representation	False colors or black and white	
Temperature measuring range (adjustable)	High Sensitivity: -40 to $160^{\circ}$ C/-40 to $320^{\circ}$ F – Low Sensitivity: -40 to $550^{\circ}$ C/-40 to $1022^{\circ}$ F	
Temperature measuring method (via camera)	In the center of the image (2x2 pixels)	Complete image areas (customizable temperature measuremnt windows)
Max. accuracy of temperature measurement	+/- 20°C	+/- 10°C
decardey of temperature measurement	1/- 20 C	1/-10 C
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)	M16B Thermal	M16B Thermal TR
Optical Lenses/Sensors, 6MP, 3072 x 2048	M16B Thermal  Day/Color: Mx-0  Night/Black&White:	·
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°),	M16B Thermal  Day/Color: Mx-  Night/Black&White:  LPF/Black&White:  Day/Color: Mx-  Night/Black&White:	M16B Thermal TR O-SMA-S-6D016 Mx-O-SMA-S-6N016
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x	M16B Thermal  Day/Color: Mx-I Night/Black&White: LPF/Black&White: Day/Color: Mx-I Night/Black&White: LPF/Black&White: Day/Color: Mx-I Night/Black&White: Night/Black&White:	M16B Thermal TR  O-SMA-S-6D016 Mx-O-SMA-S-6N016 Mx-O-SMA-S-6L016  O-SMA-S-6D036 Mx-O-SMA-S-6N036
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF  Sensor module with Super Wide Lens B041 (90° x	M16B Thermal  Day/Color: Mx-Night/Black&White: LPF/Black&White: Day/Color: Mx-Night/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: LPF/Black&White: Day/Color: Mx-Night/Black&White: Night/Black&White:	M16B Thermal TR  D-SMA-S-6D016 Mx-O-SMA-S-6N016 Mx-O-SMA-S-6L016  D-SMA-S-6D036 Mx-O-SMA-S-6N036 Mx-O-SMA-S-6L036  D-SMA-S-6D041 Mx-O-SMA-S-6N041
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF  Sensor module with Super Wide Lens B041 (90° x 67°), night version optionally with LPF  Sensor module with Wide Lens B061 (60° x 45°),	M16B Thermal  Day/Color: Mx-INight/Black&White: LPF/Black&White: LPF/Black&White: Day/Color: Mx-INight/Black&White: LPF/Black&White: LPF/Black	M16B Thermal TR  O-SMA-S-6D016 Mx-O-SMA-S-6N016 Mx-O-SMA-S-6L016  O-SMA-S-6D036 Mx-O-SMA-S-6N036 Mx-O-SMA-S-6L036  D-SMA-S-6D041 Mx-O-SMA-S-6N041 Mx-O-SMA-S-6L041  O-SMA-S-6D061 Mx-O-SMA-S-6D061
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF  Sensor module with Super Wide Lens B041 (90° x 67°), night version optionally with LPF  Sensor module with Wide Lens B061 (60° x 45°), night version optionally with LPF  Sensor module with Standard Lens B079 (45° x 34°),	Day/Color: Mx-Night/Black&White: LPF/Black&White: Day/Color: Mx-Night/Black&White: LPF/Black&White:	M16B Thermal TR  D-SMA-S-6D016 Mx-O-SMA-S-6N016 Mx-O-SMA-S-6L016  D-SMA-S-6D036 Mx-O-SMA-S-6N036 Mx-O-SMA-S-6L036  D-SMA-S-6D041 Mx-O-SMA-S-6N041 Mx-O-SMA-S-6L041  D-SMA-S-6D061 Mx-O-SMA-S-6N061 Mx-O-SMA-S-6L061  D-SMA-S-6D079 Mx-O-SMA-S-6N079
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF  Sensor module with Super Wide Lens B041 (90° x 67°), night version optionally with LPF  Sensor module with Wide Lens B061 (60° x 45°), night version optionally with LPF  Sensor module with Standard Lens B079 (45° x 34°), night version optionally with LPF  Sensor module with Tele Lens B119 (31° x 23°), night	M16B Thermal  Day/Color: Mx-INight/Black&White: LPF/Black&White: LPF/Black&White: Day/Color: Mx-INight/Black&White: LPF/Black&White: LPF/Black	M16B Thermal TR  0-SMA-S-6D016 Mx-0-SMA-S-6N016 Mx-0-SMA-S-6L016  0-SMA-S-6D036 Mx-0-SMA-S-6N036 Mx-0-SMA-S-6N036 Mx-0-SMA-S-6N041 Mx-0-SMA-S-6D041 Mx-0-SMA-S-6D041 0-SMA-S-6D061 Mx-0-SMA-S-6D061 Mx-0-SMA-S-6N061 Mx-0-SMA-S-6N079 Mx-0-SMA-S-6N079 Mx-0-SMA-S-6L079 0-SMA-S-6D119 Mx-0-SMA-S-6N119
Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)  Sensor module with Fisheye Lens B016 (180° x 180°), night version optionally with long-pass filter (LPF)  Sensor module with Ultra Wide Lens B036 (103° x 77°), night version optionally with LPF  Sensor module with Super Wide Lens B041 (90° x 67°), night version optionally with LPF  Sensor module with Wide Lens B061 (60° x 45°), night version optionally with LPF  Sensor module with Standard Lens B079 (45° x 34°), night version optionally with LPF  Sensor module with Tele Lens B119 (31° x 23°), night version optionally with LPF  Sensor module with Distant Tele Lens B237 (15° x	Day/Color: Mx-Night/Black&White: LPF/Black&White: LPF/Bla	M16B Thermal TR  O-SMA-S-6D016 Mx-O-SMA-S-6N016 Mx-O-SMA-S-6L016  O-SMA-S-6D036 Mx-O-SMA-S-6N036 Mx-O-SMA-S-6L036  O-SMA-S-6D041 Mx-O-SMA-S-6D041 Mx-O-SMA-S-6L041  O-SMA-S-6D061 Mx-O-SMA-S-6L061  O-SMA-S-6D061 Mx-O-SMA-S-6L061  O-SMA-S-6D079 Mx-O-SMA-S-6L061  O-SMA-S-6D079 Mx-O-SMA-S-6L079  O-SMA-S-6D119 Mx-O-SMA-S-6L119  O-SMA-S-6D237 Mx-O-SMA-S-6N237



Sensor module with CSVario Lens B045 100 CS  Pay/Color: No. O SMA. S-GRCSV Night/Black&Whitt: No. O SMA. S-GRCSV Night/Black&Whitts Night/Black Night/Black&Whitts Ni	Optical Lenses/Sensors, 6MP, 3072 x 2048 (Available With Optional Sensor Module)	M16B Thermal	M16B Thermal TR	
Color or Black And White  Color Sensor vith Individual exposure 20nes  Black And White Sensor vith 20nd  Black And White Sensor vith 20nd  Microprocessor  LNX 6 Dual Core incl. GPU 10 GB RAM, 512 MB Flash)  LNA 6 Dual Core incl. GPU 10 GB RAM, 512 MB Flash)  LNA 6 Dual Core incl. GPU 10 GB RAM, 512 MB Flash)  LNA 6 Dual Core incl. GPU 10 GB RAM, 512 MB Flash)  Microprocessor  Ves, bandwidth limitation available, output image format up to QXGA  Protection class  IP66 and MOG; with second 6MP sensor module: IRGM with 8036 to 9237, MOG with 8036 to 923	Sensor module with CSVario Lens B045-100-CS	**		
Hardware   MIGB Thermal   MIGB Thermal   MIGB Thermal TR	Image sensor with individual exposure zones			
Microprocessor   LMX 6 Dual Core incl. GPU (1 GR RAM, 512 MB Flash)	Light sensitivity in lux at 1/60 s and 1/1 s	· · ·		
H.264 Hardware-Codec Yes, bandwidth limitation available; output image format up to QXGA Protection class IP66 and IK06; with second 6MP sensor module: IK04 with B036 to B237, IK06 with B016 Intended use Not for use in hazardous areas (Ex area); no mounting behind glass windows Ambient temperature (range, incl. storage) 40 to 60°C/-40 to 140°C (cold boot from -30°C/-22°F) Microphone/speaker Yes; Ves  Microphone/speaker Yes; Wes 16bit/16kHz HD wideband audio (Opus codec) Passive infrared sensor (PIR) Yes Temperature sensor Yes Shock detector (tamper detection) Yes Power consumption (typically at 20°C/68°F) Poec class (IEEE 802.3af) Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation) Interfaces Ethernet 100BaseT/MxBus/USB With accessory (MX-232-10-Box) Mounting options Weight 1,320 g Mounting options Weight 1,320 g Potential (Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount included) Dimensions (height x width x depth) Potential decension Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 methernet patch cable, 1 blind module, Quick Install Detailed technical documentation Www.mobotix.com > Support > Download Center MTBF Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 methernet patch cable, 1 blind module, Quick Install Potalled technical documentation Www.mobotix.com > Support > Download Center WWw.mobotix.com > Support > Download Cent	Hardware	M16B Thermal	M16B Thermal TR	
Protection class  IP66 and IK06; with second 6MP sensor module: IK04 with B036 to B237, IK06 with B016 Intended use  Not for use in hazardous areas (Ex area); no mounting behind glass windows  Ambient temperature (range, incl. storage) Internal DVR, ex works  A GB (microSD) Microphone/speaker  Yes, Yes  Internal DVR, ex works  A GB (microSD) Microphone/speaker  Yes (Ive and audio messages) Passive infrared sensor (PIR)  Yes  Temperature sensor  Yes  Shock detector (tamper detection)  Power consumption (typically at 20°C/68°F)  Poet class (IEEE 802.3af) Interfaces Ethernet 100BaseT/MxBus/USB  Interfaces Ethernet 100BaseT/MxBus/USB  Interfaces Ethernet 100BaseT/MxBus/USB  Multing options  Mall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Weight  1.320 g  Housing  Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  www.mobotix.com > Support > Download Center  MTBF  ENS5032:2012  ENS5032:2012  ENS5032:2012  ENS5032:2012  ENS5032:2013  ENS5032:2010  ENS5032:2013  ENS5032:2013  ENS5032:2010  ENS5032:2013  ENS5032:2010  ENS5032:2013  EN	Microprocessor	i.MX 6 Dual Core incl. GPU	(1 GB RAM, 512 MB Flash)	
Internded use  Not for use in hazardous areas [£x area]; no mounting behind glass windows  Ambient temperature (range, incl. storage)  -40 to 60°C/-40 to 140°F (cold boot from -30°C/-22°F)  Internal DVR, ex works  4 GB (microSD)  Microphone/speaker  Yes (live and audio messages)  Passive infrared sensor (PIR)  Yes  Temperature sensor  Yes  Shock detector (tamper detection)  Power consumption (typically at 20°C/68°F)  PoE class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interface RS232  With accessory (MX-232-10-Box)  Mounting options  Wall, pole or celling (wall and celling mount included)  Dimensions (height x width x depth)  Weight  Housing  Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlox wall and celling mount with rubbes sealing, 0.5 m ethermet patch cable, 1 bind module, Quick Install  Potacles (the chinical documentation  Online version of this document  MTBF  Protocols  PP-302-2010; ENS502-2010; ENS5024-2010; ENS 1000-6-1-2007; EN 6100-6-2-2005  ENS5022-2010; ENS5022-2010; ENS 5000-6-1-2007; EN 6100-6-2005  ENS5022-2010; ENS502-2010; ENS 5000-6-1-2007; EN 6100-6-1-2007  ENS5022-2010; ENS502	H.264 Hardware-Codec	Yes, bandwidth limitation available	e; output image format up to QXGA	
Ambient temperature (range, incl. storage) Internal DVR, ex works  A GB (microSD)  Microphone/speaker  Yes/ves  16bit/16kHz HD wideband audio (Opus codec) Passive infrared sensor (PIR)  Yes  Temperature sensor  Shock detector (tamper detection) Power consumption (typically at 20°C/68°F) Power consumption (typically at 20°C/6	Protection class	IP66 and IK06; with second 6MP sensor mod	dule: IK04 with B036 to B237, IK06 with B016	
Internal DVR, ex works  Microphone/speaker  Yes/Yes  18bit/16kHz HD wideband audio (Opus codec)  Passive infrared sensor (PIR)  Temperature sensor  Nes  Shock detector (tamper detection)  Power consumption (typically at 20°C/68°F)  PoE class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interfaces Ethernet 1008aseT/MxBus/USB  Nes (MxRJ45)/Yes/Yes  With accessory (Mx-232-10-Box)  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Pet 3-306 F, color: white  Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 bilind module, Quick Install  Detailed technical documentation  Mull pole or eling (wall and seling mount included)  Extended accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 bilind module, Quick Install  Detailed technical documentation  www.mobotix.com > Support > Download Center  MTBF  Secreys, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 bilind module, Quick Install  Detailed technical documentation  www.mobotix.com > Support > Download Center  MTBF  Secreys, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 bilind module, Quick Install  ENS5022:2012 (ENS5022:2012 (ENS5022:2012 (ENS5022:2012 (ENS5022:2013 (ENS5022:	Intended use	Not for use in hazardous areas (Ex area	a); no mounting behind glass windows	
Microphone/speaker Yes/Ves 16bit/16kHz HD wideband audio (Opus codec) Passive infrared sensor (PIR) Yes Temperature sensor Yes Shock detector (tamper detection) Yes Power consumption (typically at 20°C/68°F) PoE class (IEEE 802.38f) OC class 2 or 3 (variable), factory setting: class 3 (required for thermal operation) Interfaces Ethernet 100BaseT/MxBus/USB Netfaces Ethernet 100BaseT/MxBus/USB Netfaces Ethernet 100BaseT/MxBus/USB Netface RS232 With accessory (Mx-232-10-Box) Mounting options Wall, pole or ceiling (wall and ceiling mount included) Dimensions (height x width x depth) Neight Netface RS232 Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install Detailed technical documentation Nouline version of this document Wew, mobotix.com > Support > Download Center NTBF Senson Suppor	Ambient temperature (range, incl. storage)	-40 to 60°C/-40 to 140°F (c	old boot from -30°C/-22°F)	
16bit/16kHz HD wideband audio (Opus codec) Passive infrared sensor (PIR) Yes  Temperature sensor Yes Shock detector (tamper detection) Power consumption (typically at 20°C/68°F) PoE class (IEEE 802.3af) Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation) Interfaces Ethernet 100BaseT/MxBus/USB Interfaces Ethernet 100BaseT/MxBus/USB With accessory (Mx-232.40-Box) Mounting options Wall, pole or ceiling (wall and ceiling mount included) Dimensions (height x width x depth) Weight 1,320 g Housing Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install Detailed technical documentation www.mobotix.com > Support > Download Center  WIBF Screws, dowels, screw caps, 20 flex wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install Detailed technical documentation www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WWW.mobotix.com > Support > Download Center  WIBF Sexems of this document Www.mobotix.com > Support > Download Center  WiBF Sexems	Internal DVR, ex works	4 GB (m	icroSD)	
Passive infrared sensor (PIR)  Temperature sensor  Yes  Shock detector (tamper detection)  Power consumption (typically at 20°C/68°F)  Power consumption (typically at 20°C/68°F)  Power consumption (typically at 20°C/68°F)  Po W (10 W possible over the short term)  PoE class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interfaces Ethernet 100BaseT/MxBus/USB  Yes (MxR.45)/Yes/Yes  Muth accessory (Mx.232-10-Box)  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Weight  1,320 g  Housing  PDET-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Www.mobotix.com > Support > Download Center  Online version of this document  WWW.mobotix.com > Support > Download Center  MTBF  > 80,000 hours  ENS5032:2012  ENS5032:2012  ENS5032:2012  ENS5032:2012  ENS5032:2010 ENS1004-61:2007; EN 61000-6-2:2005  ENS1000-6-3:2007+A1:2011 EN6100-6-4:2007+A1:2011  AS/ NZS CISPRE2:2009+A1:2010 CFR47 ECC part12B  Protocols  IPV4, IPV6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  Available video codecs  MXPEG/MJPEG/H.264  MyPEG/MJPEG/H.264  Image Formats  Freely configurable format 4: 3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (SMP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	Microphone/speaker	Yes	Yes	
Temperature sensor  Shock detector (tamper detection)  Power consumption (typically at 20°C/68°F)  Power consumption (typically at 20°C/68°F)  Power consumption (typically at 20°C/68°F)  Po Class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interfaces Ethernet 100BaseT/MxBus/USB  Yes (MxR.445)/Yes/Yes  Interface RS232  With accessory (MX-232-10-Box)  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  210 x 158 x 207 mm  Weight  1,320 g  PBT-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Www.mobotix.com > Support > Download Center  MTBF  Server, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Potalide technical documentation  Www.mobotix.com > Support > Download Center  WWW.mobotix.com > Support > Download Center  MTBF  Sensiono-6-3:2007+12:2011  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN50024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+12:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+12:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+12:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN5032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+11:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+11:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+11:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN5032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN5032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN5032:2012  EN5032:2	16bit/16kHz HD wideband audio (Opus codec)	Yes (live and au	udio messages)	
Shock detector (tamper detection) Power consumption (typically at 20°C/68°F) Power consumption (typically at 20°C/68°F) Po (10 W possible over the short term) PoE class (IEEE 802.3af) Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation) Interfaces Ethernet 100BaseT/MxBus/USB Yes (MxR,J45)/Yes/Yes Interface R5232 With accessory (Mx-232-IO-Box) Mounting options Wall, pole or ceiling (wall and ceiling mount included) Dimensions (height x width x depth) Poet a 1,320 g Housing Petr-30GF, color: white Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install Detailed technical documentation Www.mobotix.com > Support > Download Center WITEF  Poet a 1,820 g Www.mobotix.com > Support > Download Center With a 1,820 g EN55022:2010; EN55024:2010 EN55024:2010 EN500-6-1:2007; EN 61000-6-2:2005 EN61000-6-3:2007+1:2011 EN61000-6-1:2007; EN 61000-6-2:2005 EN61000-6-3:2007+1:2011 EN61000-6-1:2007; EN 61000-6-2:2005 EN61000-6-3:2007+1:2011 CRIADO-6-4:2007+1:2011 AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  Male Thermal  M16B Thermal TR  WxPEG/MJPEG/H.264  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (SMP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	Passive infrared sensor (PIR)	Ye	es	
Power consumption (typically at 20°C/68°F)  PoE class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interfaces Ethernet 100BaseT/MxBus/USB  Interface R5232  Mounting options  Dimensions (height x width x depth)  Weight  Housing  Standard accessory  Sta	Temperature sensor	Ye	es	
PoE class (IEEE 802.3af)  Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)  Interfaces Ethernet 100BaseT/MxBus/USB  Interface RS232  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Veight  1,320 g  Housing  PBT-30GF, color: white  Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Www.mobotix.com > Support > Download Center  MTBF  Postocols  EN55032:2012  EN55022:2010; EN55024:2010 EN51000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-1:2007 EN 61000-6-2:2007 EN 61000-6-3:2007+A1:2011 EN 61000-6-3:2	Shock detector (tamper detection)	Yes		
Interfaces Ethernet 100BaseT/MxBus/USB  Ves (MxRJ45)/Yes/Yes  With accessory (MX-232-IO-Box)  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Veight  1,320 g  Housing  PBT-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Www.mobotix.com > Support > Download Center  Online version of this document  Www.mobotix.com > Support > Download Center  MTBF  Postocols  EN55022:2010; EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  IPV4, IPV6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	Power consumption (typically at 20°C/68°F)	9 W (10 W possible over the short term)		
Interface RS232  Mith accessory (MX-232-IO-Box)  Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  Weight  1,320 g  Housing  PBT-30GF, color: white  Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  www.mobotix.com > Support > Download Center  Online version of this document  MTBF  80,000 hours  EN55032:2012  EN55022:2010; EN55022:2010 EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR4T FCC part15B  Protocols  IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	PoE class (IEEE 802.3af)	Class 2 or 3 (variable), factory setting: class 3 (required for thermal operation)		
Mounting options  Wall, pole or ceiling (wall and ceiling mount included)  Dimensions (height x width x depth)  210 x 158 x 207 mm  Weight  1,320 g  PBT-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Www.mobotix.com > Support > Download Center  Online version of this document  MTBF  >80,000 hours  Certifications  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  IPV4, IPV6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SMMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  M26B Thermal TR  MxPEG/MJPEG/H.264  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (SMP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP  Yes	Interfaces Ethernet 100BaseT/MxBus/USB	Yes (MxRJ4	15)/Yes/Yes	
Dimensions (height x width x depth)  210 x 158 x 207 mm  1,320 g  Housing  PBT-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  Detailed technical document  Www.mobotix.com > Support > Download Center  MTBF  > 80,000 hours  Certifications  EN55032:2012  EN55032:2012  EN55032:2012  EN55032:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS / NZS CISPR22:2009+A1:2010 CFR47 FCC part1SB  Protocols  IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (SMP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Wes  Multicast stream via RTSP	Interface RS232	With accessory (	(MX-232-IO-Box)	
Housing PBT-30GF, color: white  Standard accessory Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install Detailed technical documentation www.mobotix.com > Support > Download Center  Online version of this document www.mobotix.com > Support > Download Center  MTBF > 80,000 hours  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:20074-A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols IPV4, IPV6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018) 3 years  Image Formats, Frame Rates, Image Storage M16B Thermal M16B Thermal TR  Available video codecs MxPEG/MJPEG/H.264  Image formats Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming Yes  Multicast stream via RTSP Yes	Mounting options	Wall, pole or ceiling (wall a	nd ceiling mount included)	
Housing PBT-30GF, color: white  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation	Dimensions (height x width x depth)	210 x 158 x 207 mm		
Standard accessory  Screws, dowels, screw caps, 2 allen wrenches, module key, VarioFlex wall and ceiling mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Www.mobotix.com > Support > Download Center  Online version of this document  Www.mobotix.com > Support > Download Center  MTBF  > 80,000 hours  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005	Weight	1,320 g		
mount with rubber sealing, 0.5 m ethernet patch cable, 1 blind module, Quick Install  Detailed technical documentation  www.mobotix.com > Support > Download Center  Online version of this document  www.mobotix.com > Support > Download Center  MTBF  > 80,000 hours  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005	Housing	PBT-30GF, o	color: white	
Online version of this document  Www.mobotix.com > Support > Download Center  > 80,000 hours  EN55032:2012  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MXPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP  Yes	Standard accessory			
MTBF  > 80,000 hours  EN55032:2012  EN55032:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005	Detailed technical documentation	www.mobotix.com > Support > Download Center		
Certifications  EN55032:2012  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005  EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011  AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  3 years  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	Online version of this document	www.mobotix.com > Support > Download Center		
Certifications  EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005 EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011 AS/ NZS CISPR22:2009+A1:2010 CFR47 FCC part15B  Protocols  IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, RTP, RTSP, UDP, SNMP, SMTP, DHCP (client and server), NTP (client and server), SIP (client and server) G.711 (PCMA and PCMU) and G.722  Manufacturer's warranty (since May 2018)  3 years  Image Formats, Frame Rates, Image Storage  M16B Thermal  M16B Thermal TR  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	MTBF	> 80,000 hours		
Manufacturer's warranty (since May 2018)  Image Formats, Frame Rates, Image Storage  M16B Thermal  Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP	Certifications	EN55022:2010; EN55024:2010 EN61000-6-1:2007; EN 61000-6-2:2005 EN61000-6-3:2007+A1:2011 EN61000-6-4:2007+A1:2011		
Image Formats, Frame Rates, Image StorageM16B ThermalM16B Thermal TRAvailable video codecsMxPEG/MJPEG/H.264Image formatsFreely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)MultistreamingYesMulticast stream via RTSPYes	Protocols			
Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP  Yes	Manufacturer's warranty (since May 2018)	3 years		
Available video codecs  MxPEG/MJPEG/H.264  Image formats  Freely configurable format 4:3, 8:3, 16:9 or customized format (Image Cropping), such as 2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP  Yes	Image Formats, Frame Rates, Image Storage	M16B Thermal	M16B Thermal_TR	
Image formats  2592x1944 (5MP), 2048x1536 (QXGA), 1920x1080 (Full-HD), 1280x960 (MEGA)  Multistreaming  Yes  Multicast stream via RTSP  Yes				
Multicast stream via RTSP Yes	Image formats	, ,		
Multicast stream via RTSP Yes	Multistreaming	Yes		
Max. image format (dual image from both sensors) 2x 6MP (6144 x 2048)		Yes		
	Max. image format (dual image from both sensors)	2x 6MP (6144 x 2048)		



Image Formats, Frame Rates, Image Storage	M16B Thermal	M16B Thermal TR	
Max. frame rate for thermal images, Thermal Overlay and dual images (thermal & optical)	9 frames per second (fps)		
Max. frame rate for optional optical 6MP sensor module (fps, only single core used)	MxPEG: 42@HD(1280x720), 34@Full-HD, 24@QXGA, 15@5MP, 12@6MP, 6@2x 6MP MJPEG: 26@HD(1280x720), 13@Full-HD, 9@QXGA, 5@5MP, 4@6MP, 2@2x 6MP H.264: 25@Full-HD, 20@QXGA		
Number of images with 4 GB microSD (internal DVR)	CIF: 250,000, VGA: 125,000, HD: 40,000, QXGA: 20,000, 6MP: 10,000		
General Functions	M16B Thermal	M16B Thermal TR	
Temperature measurement of 2x2 pixels in the center of the image (Thermal Spot)	Yes	Yes	
TR temperature measurement in the whole image area	No	Yes	
Event trigger for temperatures above or below a limit between -40 to 550°C/-40 to 1022°F	Yes	Yes	
Digital zoom and pan	)	/es	
ONVIF compatibility	Yes (Profile S, audio support with	camera firmware V5.2.x and higher)	
Genetec protocol integration	١	/es	
Programmable exposure zones	,	Yes	
Snapshot recording (pre/post-alarm images)	Yes		
Continuous recording with audio	Yes		
Event recording with audio	Yes		
Time controlled flexible event logic	Yes		
Weekly schedules for recordings and actions	Yes		
Event video and image transfer via FTP and email	Yes		
Playback and QuadView via web browser	Yes		
Bidirectional audio in browser	Yes		
Animated logos on the image	١	/es	
Master/Slave functionality	١	/es	
Privacy zone scheduling	١	/es	
Customized voice messages	١	/es	
VoIP telephony (audio/video, alert)	Yes		
Remote alarm notification (network message)	Yes		
Programming interface (HTTP-API)	Yes		
DVR/Storage Management	Inside camera via microSD card, externally via USB device and NAS, different streams for live image and recording, MxFFS with archive function, pre-alarm an post-alarm images, monitoring recording with failure reporting		
Camera and data security	User and group management, SSL connections, IP-based access control, IEEE802.1x, intrusion detection, digital image signature		
MxMessageSystem: Sending and receiving of MxMessages	Yes		
Video Analysis	M16B Day M16E	3 Night M16B Day & Night	
Video motion detector		/es	
MxActivitySensor	Yes		
Video Management Software	M16B Day M16E	3 Night M16B Day & Night	
MxManagementCenter	\	es es	
Mobile MOBOTIX App	Yes		



