

February 2014

M15D-Thermal Thermographic Camera With L43, L65 Or L135 Thermal Sensor Module



M15D Complete Sets Day & Night

BlockFlexMount Sensor Modules For S15D

D15D Lens Unit With Long-Pass Filter (LPF) Including B/W Sensor

Quad Frame Four-Piece Frame For The IP Video Door Station

MOBOTIX Cable Guide Overview Of USB Connection Cables (Including New Cables)

Contents

New Hardware And Software From February 2014

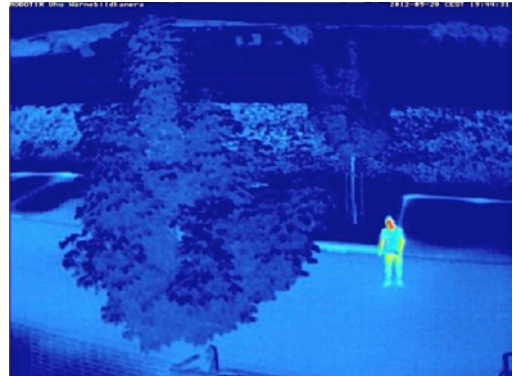
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1. M15D-Thermal Thermographic Camera

Basic information

Thermographic technology, or thermography, is a contactless imaging procedure that makes it possible to see the thermal radiation of an object or body otherwise invisible to the human eye (medium infrared). Thermography detects and depicts temperature distribution on surfaces and objects. Thermographic cameras generally display heat intensity information as a gray-scale image. However, the human eye cannot discriminate between very fine gray tones. Therefore, it is common to create images in off-color representations (see figure right). The resolution of thermographic cameras is considerably lower than cameras for the visible spectral range. The resolution, together with the lenses in use or the field of view of the camera, determine the maximum detection distance.



MOBOTIX M15D-Thermal: Weatherproof IP thermographic camera, protection class IP66 (-30°C to +60°C/-22°F to +140°F)

A thermographic camera sees what would otherwise be invisible to the human eye. Based on the proven M15 system platform, the new M15D-Thermal offers brand new application options. In combination with the camera's existing sensors (PIR sensor, microphone etc.) and the analysis capabilities of the camera software (MxActivitySensor, video motion detection, event logic etc.), it is now possible to reliably detect people and cars hidden behind bushes etc. and their direction of movement, even in complete darkness.

The M15D-Thermal is available in three different versions that differ only by the high-performance lens incorporated in the thermal image sensor.

- **MX-M15D-Thermal-L43** with a horizontal image angle of **45°**
- **MX-M15D-Thermal-L65** with a horizontal image angle of **25°**
- **MX-M15D-Thermal-L135** with a horizontal image angle of **17°**

The thermal image sensor, including the lens, is pre-installed in a **special metal housing** at the MOBOTIX factory on the right hand side of the front plate of the M15D when viewed from the camera. Both the protective screen and the lens of the objective in use are made using the **semiconductor material germanium**, as standard glass would not allow infrared thermal radiation to pass through to the sensor. Unlike the 5 MP sensor modules for the M15D/S15D, it is only possible to **exchange/replace** the complete thermal sensor module (including lens) integrated into the M15D-Thermal at the MOBOTIX factory. When exchanging a module, it is possible to switch to any of the thermal sensor module focal lengths on offer (L43, L65 or L135). It is not possible to integrate a thermal sensor module in the standard M15D camera housing (MX-M15D-Sec) or connect it to the S15D.

If there is a **glass panel** between the thermographic camera and the person/object to be detected, the camera can no longer detect thermal radiation; the people/objects are invisible to the thermal sensor. As a result, a thermal image sensor cannot, for example, be used to determine whether a person is located in a locked car or behind a window. **Solution:** Install an additional standard camera or an M15D-Thermal with a second 5 MP sensor module!

Two cameras in one: Thermal image sensor for detection plus a 5 MP sensor module for identification

The modular design of the M15D system platform ensures maximum flexibility for the MOBOTIX thermographic camera. The M15D-Thermal comes standard with a thermal image sensor and a dummy module (to remain weatherproof to IP66). In addition, it is possible to use any MOBOTIX sensor modules (5 MP, color or black and white, telephoto to Hemispheric, with or without long-pass filter/LPF) in the M15D-Thermal for identification. Camera software is then used to activate the dual image display on one of the two image sensors (thermal or standard) or both simultaneously.

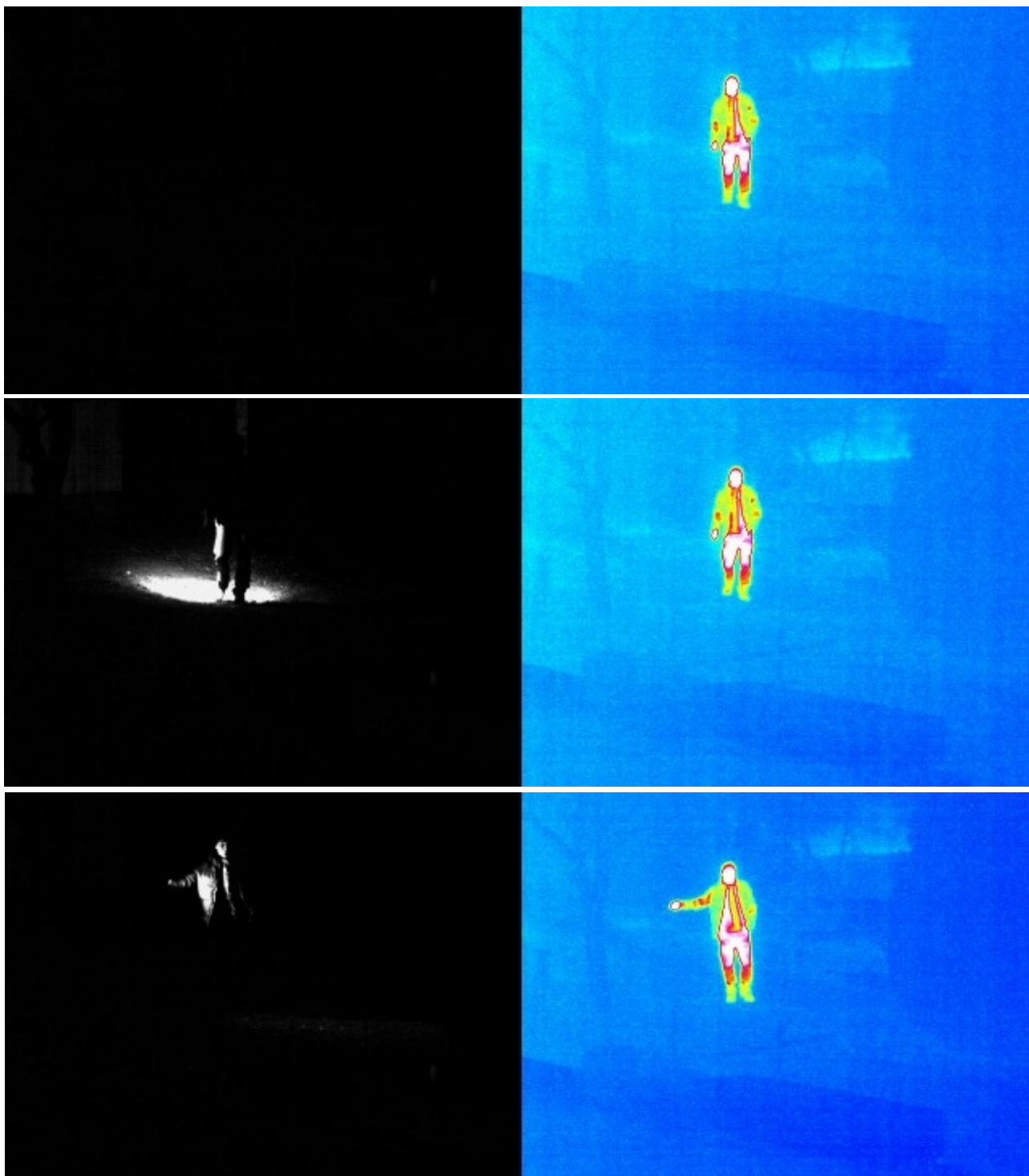
M15D-Thermal Technical Data (Differences Compared To Standard M15D)	
M15D-Thermal Models	MX-M15D-Thermal-L43/L65/L135, dual operation with additional MOBOTIX sensor module possible, mono operation with dummy module only (included in delivery)
Thermal image sensor lens options	L43: 45°, L65: 25°, L135: 17° (horizontal image angle)
Thermal image sensor sensitivity	NETD typ. 50 mK, <79 mK , IR range: 7.5 to 13.5 µm
Expected service life of thermal image sensor	> 80,000 hours (MTBF – Mean Time Before Failure)
Temperature measuring range of thermal image sensor	-40°C to +550°C/-40°F to +1022°F (temperature of the objects to be detected)
Thermal image sensor type and resolution	Uncooled microbolometer with 336 x 252 pixel thermal image that can be scaled up by the camera firmware up to QXGA size (2048 x 1536 pixels); digital zoom function also available for the thermal image
Max. frame rate for thermal images	9 fps, even when the thermal image sensor and (optional) MOBOTIX sensor module are displayed simultaneously
Image processing for thermal image sensor	Video sensor (motion detection/MxActivitySensor), display options (via web browser): Off-color or black and white image, automatic or manual adjustment of the temperature range
Power supply	Year-round Power-over-Ethernet (IEEE 802.3af); PoE class 3 required, power consumption typically < 5 W with thermal image sensor only, < 5.5 W with additional MX sensor module
Operating conditions	IP66, -30°C to +60°C/-22°F to +122°F (for dual operation or mono operation with dummy module)
M15D-Thermal dimensions/weight (without additional MX sensor module)	W x H x D with wall mount: 158 x 244 x 239 mm; W x H x D with ceiling mount: 158 x 210 x 207 mm; Weight with wall mount: Approx. 1210 g Weight with ceiling mount: Approx. 1160 g
Weight of MX sensor modules	L12: 85 g L25, L51: 111 g L38, L76, L160: 122 g
Standard functions (as with M15D)	Sensors, alarm/events, DVR, image formats, image compression, vPTZ, certificates, interfaces, microphone, speaker, sound functions, security



M15D-Thermal in mono operation (with dummy module)



Components supplied with the M15D-Thermal
(including dummy module 1.4)

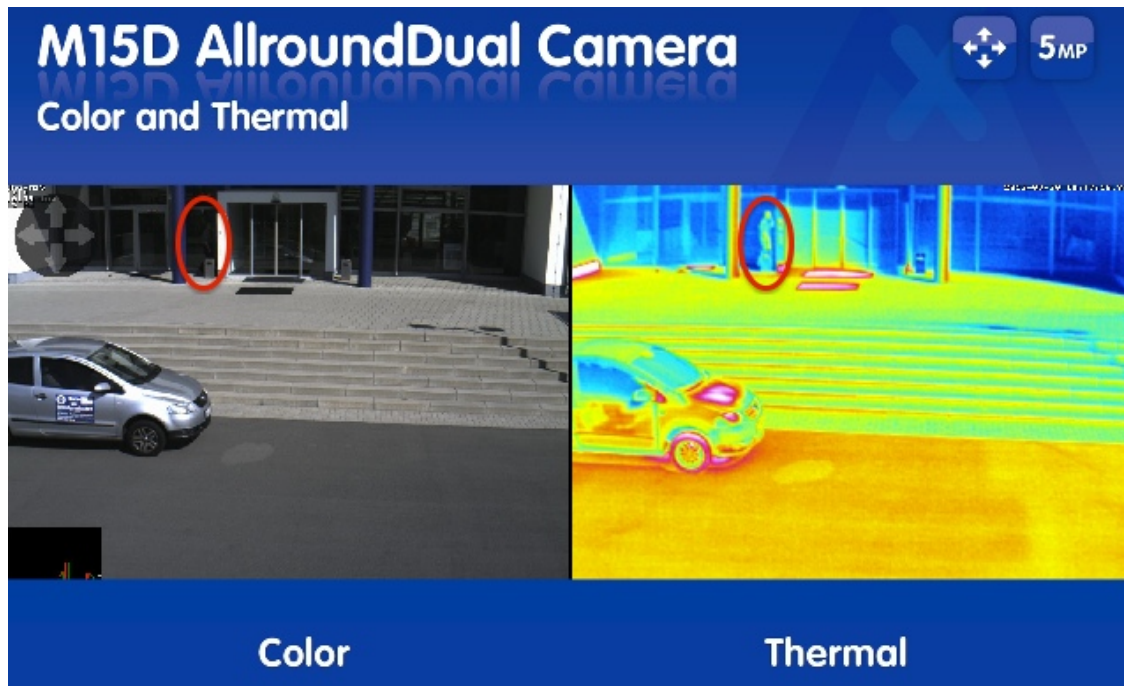


B/W sensor image compared to thermal sensor image in complete darkness (0 Lux):

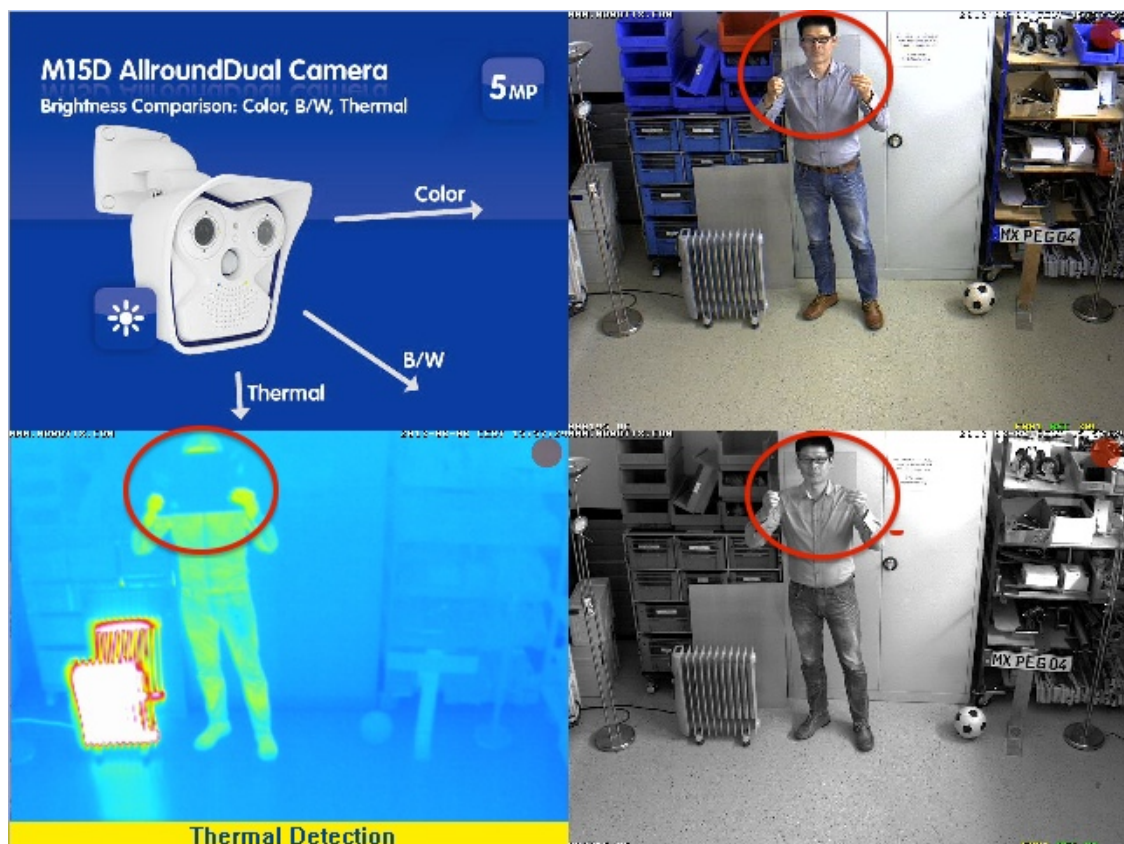
Below an illumination level of 0.05 Lux (at an exposure time of 1/60 s) or without additional IR lighting, the extremely light-sensitive MOBOTIX 5 MP B/W sensor can no longer detect anything (above left). The corresponding thermal image is on the right, where a person can clearly be identified regardless of the light conditions. See the two test shots using a flashlight below.

M15D-Thermal with an additional integrated MOBOTIX sensor module





Color sensor image and thermal sensor image in comparison: Only the thermal sensor can detect the person circled standing completely in shadows beside the entrance; it also shows that the engine of the car is still warm.



Color sensor image, B/W sensor image and thermal sensor image in comparison: The test shows that the thermal sensor cannot detect through a glass panel; however, the fact that the radiator is switched on is only visible in the thermal image.

M15D-Thermal Thermographic Camera: Highlights

The thermal sensor is capable of detecting in complete darkness and/or through smoke, smog, or a thin plastic screen (limited during thick fog); applications include border protection: view of the sea in coastal areas, ships in the distance can be recognized in hazy conditions

No glare from strong sources of light (such as headlights, hand-held lamps)

The combination with the MxActivitySensor in particular delivers extremely reliable video analysis results of person/vehicle movements, as it is now possible to block out disruptive factors such as regular movements of "cold" objects such as bushes, grass, water, clouds, waves etc.

Detection of hotter than average body parts or technical devices, detection of faults in photovoltaic systems, overheated machine bearings etc.

Detect otherwise "invisible" people and objects in shadows, behind bushes etc.

Thermal technology coverage is largely independent of distance (heat haze not a factor); thermal images for detection are an ideal addition to systems with standard image sensors (for identification)

Thermal sensor with three different focal lengths available (image angle of 17°, 25° and 45°)

Two cameras in one: Thermal sensor plus 5 MP sensor module can be displayed simultaneously in the dual image (live/recording): Thermal sensor detects (even at 0 Lux), HiRes image sensor identifies

Low camera power consumption of max. 5.5 W (thermal sensor plus 5 MP sensor module, without additional MxBus devices), PoE power supply via Ethernet cable like all other MOBOTIX cameras

No special additional software is required; the full range of functions of the M15D is available even with the thermal sensor (for example, video motion detection, digital zoom, vPTZ, internal DVR, audio etc.)

The thermal image sensor is configured using camera software in a web browser; it is possible to display the thermal image with all other MOBOTIX user software (MxEasy, MxCC, App)

Operating conditions: IP66, -30°C to +60°C/-22°F to 140°F

M15D-Thermal thermographic camera ordering information:

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-M15D-Thermal-L43	4047438020589	M15D thermographic camera with integrated L43 thermal sensor (45°, 7.5 mm), resolution: 336 x 252 pixels	4.898	Feb. 5, 2014
MX-M15D-Thermal-L65	4047438020596	M15D thermographic camera with integrated L65 thermal sensor (25°, 13 mm), resolution: 336 x 252 pixels	4.598	Feb. 5, 2014
MX-M15D-Thermal-L135	4047438020602	M15D thermographic camera with integrated L135 thermal sensor (17°, 19 mm), resolution: 336 x 252 pixels	4.598	Feb. 5, 2014

IMPORTANT:

- ➔ Delivery time for projects: Approximately 6 to 12 weeks (depending on the number of cameras)
- ➔ Orders of M15D-Thermal CANNOT be canceled by the customers.
- ➔ MOBOTIX thermal cameras contain a thermographic image sensor that can make infra-red radiation visible and that can create „thermal images“. For this reason, the regulations on page 15 of this document apply.
- ➔ The M15D-Thermal's special camera software will not be available on the MOBOTIX website as a free-of-charge download version until a later point in time.

2. M15D Complete Sets "Day & Night"

HiRes video around the clock

One of the most common applications for an M15D is as a day and night camera equipped with one color and one B/W sensor module with the same focal lengths, ensuring that the exact same area is captured in every light situation. The M15D automatically selects, without high-maintenance mechanical switching via an IR blocking filter, the color sensor with daylight lens or the B/W sensor with infrared lens. This provides for high-quality true-color images during the day and high light sensitivity at night.



Minimum light sensitivity of color sensor: 0.25 Lux at 1/60 s, 0.013 Lux at 1/1 s

Minimum light sensitivity of B/W sensor: 0.05 Lux at 1/60 s, 0.0025 Lux at 1/1 s

Factory-installed, with activated anti-theft protection!

As of now, it is possible to order the "Day & Night" versions of the M15D with five different lenses (L25 to L160) installed at the factory. The **anti-theft protection module is pre-installed in the camera housing.**

Lens options/focal lengths	L25	L38	L51	L76	L160
35mm equivalent	25 mm	38 mm	51 mm	76 mm	160 mm
Aperture	2,0	2,0	2,0	2,0	2,5
Horizontal image angle	82°	55°	40°	27°	13°
Vertical image angle	61°	41°	30°	20°	10°

M15D Complete Sets "Day & Night": Highlights

Weatherproof day and night camera with two 5 MP HiRes image sensors for operation around the clock

Factory-fitted with a mechanical anti-theft protection module within the camera housing

Easy to order a complete M15D with just the article number (see below)

Environmentally-friendly, as shipping the camera requires less packaging material

Achieve the full flexibility of the M15D platform system, as the camera can also be operated with sensor modules other than the pre-installed modules (the user simply switches them out)

M15D Complete Sets "Day & Night" ordering information:

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-M15D-Sec-DNight-D25N25	4047438020787	M15D dual camera with factory-installed 5 MP day and night sensor module L25 (82°)	1.298	Feb. 5, 2014
MX-M15D-Sec-DNight-D38N38	4047438020794	M15D dual camera with factory-installed 5 MP day and night sensor module L38 (55°)	1.298	Feb. 5, 2014
MX-M15D-Sec-DNight-D51N51	4047438020800	M15D dual camera with factory-installed 5 MP day and night sensor module L51 (40°)	1.298	Feb. 5, 2014
MX-M15D-Sec-DNight-D76N76	4047438020817	M15D dual camera with factory-installed 5 MP day and night sensor module L76 (27°)	1.298	Feb. 5, 2014
MX-M15D-Sec-DNight-D160N160	4047438020824	M15D dual camera with factory-installed 5 MP day and night sensor module L160 (13°)	1.298	Feb. 5, 2014

3. BlockFlexMount Sensor Modules For S15D

Concealed camera mounting solution with superior MOBOTIX image quality

With its S15D, MOBOTIX offers a modular dual camera platform with two sensor/lens units (sensor module) flexibly connected to the camera housing using up to two two-meter connection cables. The installation options for concealed and individual mounting solutions have been expanded further with the new **BlockFlexMount sensor modules**. Because the image sensor (color or B/W) and lens (from telephoto to Hemispheric plus CSVario) is integrated in a robust aluminum block with prepared mounting holes, the concealed mounting of a MOBOTIX HiRes camera can be carried out quickly and easily in devices such as ATMs, machines for function and production monitoring, or very discreetly in paneling, columns etc. Like the S15D standard sensor modules, the BlockFlexMount sensor modules contain the latest MOBOTIX 5 megapixel technology; the connection to the S15D camera housing is established using the familiar sensor cables in the lengths of 0.5 m, 1 m and 2 m. Here, too, the user has the option of connecting one or two BlockFlexMount sensor modules to the S15D. Mixed operation using a standard sensor module plus a BlockFlexMount sensor module is also possible and allows more individual and creative installation solutions. Every BlockFlexMount features an integrated microphone (below the lens). It is also possible to connect separate audio devices to the S15D camera housing.

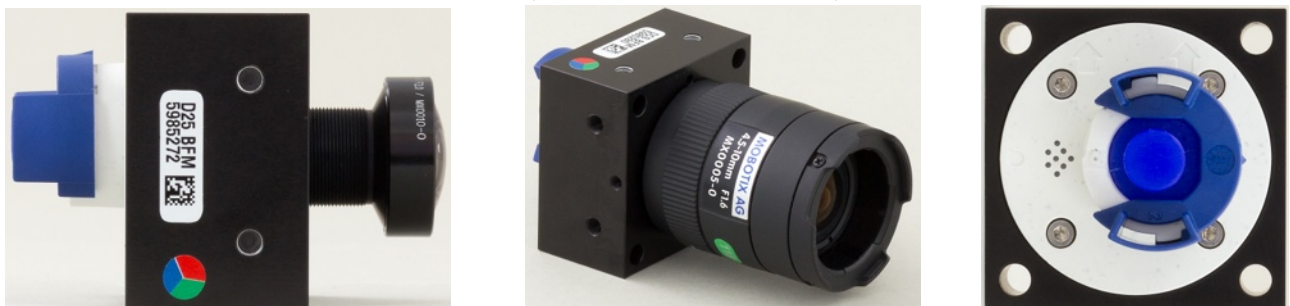


Camera lens delivers maximum flexibility

The BlockFlexMount sensor modules are delivered with the lens pre-focused at the factory. All lenses from the MOBOTIX product range (**L12, L38, L51, L76, L160 and L320**; horizontal image angle from 180° to 7°) are available in combination with one of the **5 MP color or B/W image sensors** integrated in the BlockFlexMount, also with optional integrated **long-pass filter (LPF)**. In addition, there is also a BlockFlexMount sensor module with a **CS mount** available, which can be operated with the CSVario lens from MOBOTIX or any lens with a CS mount available on the market. **The new L320 super telephoto lens (image angle of 7°) and the CS mount lenses can now also be used with an S15D!**



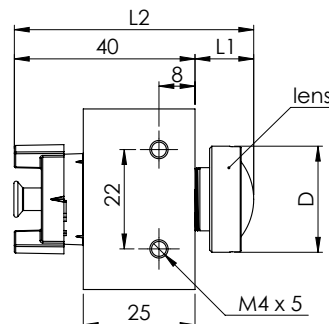
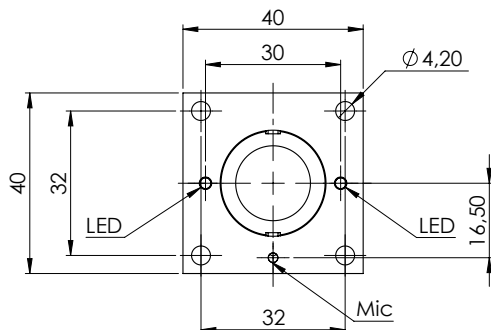
Overview of lenses used in the BlockFlexMount (exception: CSVario is not available pre-installed in the BlockFlexMount)



From left to right:

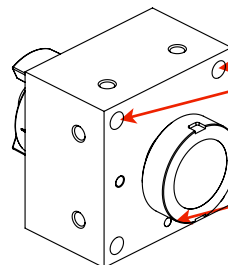
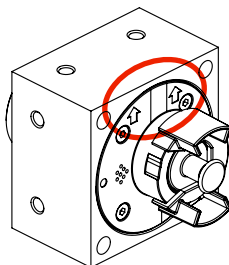
- Side view of BlockFlexMount with built-in L25 lens (including identification plate and color sensor marking)
- Color sensor version with CS mount and mounted CSVario lens (available from MOBOTIX)
- Rear side to connect the sensor cable (connection to S15D housing)

Measurements/BlockFlexMount Sensor Module Details (in mm)



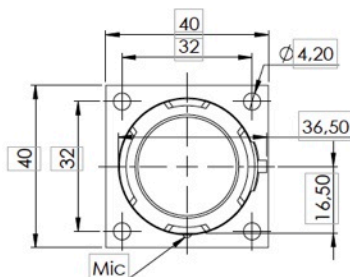
BlockFlexMount versions
with built-in lens L12 to L320

It is possible to connect **one or two** BlockFlexMount sensor modules (only) to the S15D, if necessary. A BlockFlexMount must be installed with the two **arrows on the rear** pointing upwards and the **microphone located at the bottom**.

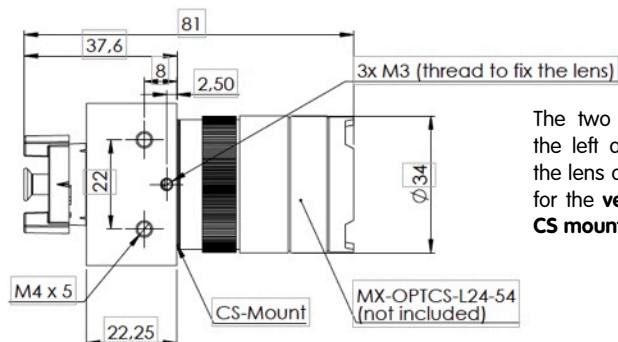


Status LEDs
(not available for the CS mount)

Microphone (must always be located at the bottom)



Depending on the CS lens in use, the **functionality of the microphone may be limited** (microphone is obstructed).



The two status LEDs on the left and right beside the lens are **not** available for the **versions with the CS mount** (see left).

S15D BlockFlexMount Sensor Modules: Highlights

Enhanced S15D system solution based on the latest MOBOTIX technology (5 MP, MxLEO, MxAnalytics etc.)

One or two BlockFlexMount sensor modules are connected to the S15D with a sensor cable just like the standard sensor modules

Perfectly suited for concealed installation in devices such as ATMs

All MOBOTIX lens/sensor combinations that are currently on offer are available, also with the CS mount and integrated long-pass filter for further special applications

If required, the user can exchange and set the focus of the lens himself (not applicable to versions with L12)

Mixed operation with the BlockFlexMount and standard sensor module possible

BlockFlexMount contains a microphone, status LEDs (not for versions with the CS mount) and several practical screw openings (M4x5) for fast and easy installation.

Robust, vibration-proof aluminum housing suitable for indoor applications that are protected from the elements

Protection class IP30 (protected against access with a tool); ambient temperature range: 0°C to +50°C/32°F to 122°F

Ordering information for BlockFlexMount with factory-installed lens:

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-BFM-MX-D12	4047438019538	BlockFlexMount with 5 MP color sensor and L12 lens (180°), IP30	218	Feb. 5, 2014
MX-BFM-MX-D25	4047438019545	BlockFlexMount with 5 MP color sensor and L25 lens (82°), IP30	168	Feb. 5, 2014
MX-BFM-MX-D38	4047438019552	BlockFlexMount with 5 MP color sensor and L38 lens (55°), IP30	168	Feb. 5, 2014
MX-BFM-MX-D51	4047438019569	BlockFlexMount with 5 MP color sensor and L51 lens (40°), IP30	168	Feb. 5, 2014
MX-BFM-MX-D76	4047438019576	BlockFlexMount with 5 MP color sensor and L76 lens (27°), IP30	168	Feb. 5, 2014
MX-BFM-MX-D160	4047438019583	BlockFlexMount with 5 MP color sensor and L160 lens (13°), IP30	168	Feb. 5, 2014
MX-BFM-MX-D320	4047438020992	BlockFlexMount with 5 MP color sensor and L320 lens (7°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N12	4047438019590	BlockFlexMount with 5 MP B/W sensor and L12 lens (180°), IP30	218	Feb. 5, 2014
MX-BFM-MX-N25	4047438019606	BlockFlexMount with 5 MP B/W sensor and L25 lens (82°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N38	4047438019613	BlockFlexMount with 5 MP B/W sensor and L38 lens (55°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N51	4047438019620	BlockFlexMount with 5 MP B/W sensor and L51 lens (40°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N76	4047438019637	BlockFlexMount with 5 MP B/W sensor and L76 lens (27°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N160	4047438019644	BlockFlexMount with 5 MP B/W sensor and L160 lens (13°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N320	4047438021005	BlockFlexMount with 5 MP B/W sensor and L320 lens (7°), IP30	168	Feb. 5, 2014
MX-BFM-MX-N25-LPF	4047438021012	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L25 lens (82°), IP30	268	Feb. 5, 2014
MX-BFM-MX-N38-LPF	4047438021029	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L38 lens (55°), IP30	268	Feb. 5, 2014
MX-BFM-MX-N51-LPF	4047438021036	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L51 lens (40°), IP30	268	Feb. 5, 2014
MX-BFM-MX-N76-LPF	4047438021043	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L76 lens (27°), IP30	268	Feb. 5, 2014
MX-BFM-MX-N160-LPF	4047438021050	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L160 lens (13°), IP30	268	Feb. 5, 2014
MX-BFM-MX-N320-LPF	4047438021067	BlockFlexMount with 5 MP B/W sensor, long-pass filter and L320 lens (7°), IP30	268	Feb. 5, 2014

Ordering information for BlockFlexMount with CS mount (without lens):

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-BFM-CS-D	4047438019514	BlockFlexMount with 5 MP color sensor for lenses with CS mount	148	Feb. 5, 2014
MX-BFM-CS-N	4047438019521	BlockFlexMount with 5 MP B/W sensor for lenses with CS mount	148	Feb. 5, 2014
MX-BFM-CS-N-LPF	4047438020985	BlockFlexMount with 5 MP B/W sensor and long-pass filter for CS mount lenses	248	Feb. 5, 2014



The BlockFlexMount sensor modules can be used with an **S15D** FlexMount camera only. Note the various IP protection classes of the individual camera modules when selecting where to install the modules.

IP65: S15D camera housing (body)

IP30: BlockFlexMount sensor modules

Any **protective housing for the BlockFlexMount sensor modules** that may still be needed must be manufactured by the customer.

4. D15D Lens Units With B/W Sensor And Long-Pass Filter

Enhanced application possibilities of a D15D at night

Complete lens units, consisting of a sensor plus lens, are available for the D15D. They can be installed in the D15D camera housing (body) and focused precisely on the monitored area. One lens unit is equipped with one 5 MP color or B/W sensor and one MOBOTIX standard L25 (super-wide angle 82°), L38 (wide-angle 55°), L51 (wide-angle 40°), L76 (telephoto 27°) or L160 (telephoto 13°) lens. Two lens units of your choice can be used in every D15D, meaning all day/day, night/night and day/night combinations are possible.

Lens units with a B/W sensor, integrated **long-pass filter (LPF)** and a lens of your choice (L25 to L160) are available for the D15D. The lens unit with LPF, together with an infrared sensor, provides the basis for optimal **license plate identification** in all lighting conditions.



D15D lens unit with integrated LPF



Application examples without/with LPF (left/right)

D15D With Long-Pass Filter: Highlights

One or two LPF lens units positioned differently can be used with one single D15D

Five different LPF lens units with B/W sensor and various image angles available

A MOBOTIX camera with LPF technology delivers the top-quality image for license plate detection

Suitable software solutions to automatically read/further process the license plate data are available on the market

Users can mount the lens units; the lens is pre-focused at the MOBOTIX factory

Also possible to use a D15D with LPF and standard lens unit together

Ordering information for the D15D lens units with B/W sensor (5 MP) and long-pass filter

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-D15-Module-N25-LPF	4047438020732	D15D lens unit with 5 MP B/W sensor, long-pass filter and L25 lens (82°)	300	Feb. 5, 2014
MX-D15-Module-N38-LPF	4047438020749	D15D lens unit with 5 MP B/W sensor, long-pass filter and L38 lens (55°)	300	Feb. 5, 2014
MX-D15-Module-N51-LPF	4047438020756	D15D lens unit with 5 MP B/W sensor, long-pass filter and L51 lens (40°)	300	Feb. 5, 2014
MX-D15-Module-N76-LPF	4047438020763	D15D lens unit with 5 MP B/W sensor, long-pass filter and L76 lens (27°)	300	Feb. 5, 2014
MX-D15-Module-N160-LPF	4047438020770	D15D lens unit with 5 MP B/W sensor, long-pass filter and L160 lens (13°)	300	Feb. 5, 2014

5. Quad Frame For The IP Video Door Station (T24/T25)

Space for four modules

MOBOTIX extends its home automation program to include frames and housings for four Door Station modules. Although it is currently only possible to use a maximum of three function modules (T25M camera module, KeypadRFID or BellRFID access module, info module with/without Mx2wire+) in an outdoor station, it is now possible to set up a planned system in such a way that it is simple to add an additional Door Station function module planned for 2014 (illumination with integrated radar technology). It is recommended to install an additional info module to fill (empty) space in the frame in the meantime.



The blue MOBOTIX key unlocks the two modules on the left side of the frame. To unlock the modules on the right side, move both red sliders upwards.

Ordering information for four-piece frame, on-wall and in-wall housing

Article number	EAN	Description	MSRP in EUR	Available in EMEA / APAC
MX-OPT-Frame-4-EXT-PW	4047438017398	Four-piece frame with anti-theft protection, color: white	118	Feb. 5, 2014
MX-OPT-Frame-4-EXT-AM	4047438017404	Four-piece frame with anti-theft protection, color: amber	123	Feb. 5, 2014
MX-OPT-Frame-4-EXT-BL	4047438017411	Four-piece frame with anti-theft protection, color: black	123	Feb. 5, 2014
MX-OPT-Frame-4-EXT-DG	4047438017428	Four-piece frame with anti-theft protection, color: dark gray	123	Feb. 5, 2014
MX-OPT-Frame-4-EXT-SV	4047438017435	Four-piece frame with anti-theft protection, color: silver	123	Feb. 5, 2014
MX-OPT-Box-4-EXT-ON-PW	4047438017442	Four-piece on-wall housing, color: white	78	Feb. 5, 2014
MX-OPT-Box-4-EXT-ON-AM	4047438017459	Four-piece on-wall housing, color: amber	83	Feb. 5, 2014
MX-OPT-Box-4-EXT-ON-BL	4047438017466	Four-piece on-wall housing, color: black	83	Feb. 5, 2014
MX-OPT-Box-4-EXT-ON-DG	4047438017473	Four-piece on-wall housing, color: dark gray	83	Feb. 5, 2014
MX-OPT-Box-4-EXT-ON-SV	4047438017480	Four-piece on-wall housing, color: silver	83	Feb. 5, 2014
MX-OPT-Box-4-EXT-IN	4047438017497	Four-piece in-wall housing, color: blue	38	Feb. 5, 2014

6. MOBOTIX Cable Guide

Overview of all cables for connecting the camera to a USB device

The connection cable for the **D24/D25** MonoDome cameras is **new**. Visit www.mobotix.com > **Products** > **Accessories** > **Cables** for a more detailed overview table (Cable Guide), including additional MOBOTIX connection cables (for example, for S14D/S15D sensor modules) and current prices.

Article number	Length	Description	For camera (except Web/Basic)	To connect
MX-CBL-MU-EN-STR-5	5 m	MiniUSB angled > MiniUSB straight	M15, M24/M25, Q24/Q25, T24/T25	MX-232-IO-Box
MX-CBL-MU-EN-STR-2	2 m	MiniUSB angled > MiniUSB straight	M15, M24/M25, Q24/Q25, T24/T25	MX-232-IO-Box
MX-CBL-MU-EN-STR-05	0.5 m	MiniUSB angled > MiniUSB straight	M15, M24/M25, Q24/Q25, T24/T25	MX-232-IO-Box
MX-CBL-MU-STR-5	5 m	MiniUSB straight > MiniUSB straight	D14/D15, S14/S15, V14/V15	MX-232-IO-Box
MX-CBL-MU-STR-2	2 m	MiniUSB straight > MiniUSB straight	D14/D15, S14/S15, V14/V15	MX-232-IO-Box
MX-CBL-MU-STR-05	0.5 m	MiniUSB straight > MiniUSB straight	D14/D15, S14/S15, V14/V15	MX-232-IO-Box
MX-CBL-MU-EN-PG-STR-5	5 m	MiniUSB+ angled > MiniUSB straight	D24/D25 (NEW)	MX-232-IO-Box
MX-CBL-MU-EN-PG-STR-2	2 m	MiniUSB+ angled > MiniUSB straight	D24/D25 (NEW)	MX-232-IO-Box
MX-CBL-MU-EN-PG-STR-05	0.5 m	MiniUSB+ angled > MiniUSB straight	D24/D25 (NEW)	MX-232-IO-Box
MX-CBL-MU-EN-EN-PG-5	5 m	MiniUSB angled > MiniUSB+ angled	M15, M24/M25, Q24/Q25, T24/T25	MX-ExtIO
MX-CBL-MU-EN-EN-PG-2	2 m	MiniUSB angled > MiniUSB+ angled	M15, M24/M25, Q24/Q25, T24/T25	MX-ExtIO
MX-CBL-MU-EN-EN-PG-05	0.5 m	MiniUSB angled > MiniUSB+ angled	M15, M24/M25, Q24/Q25, T24/T25	MX-ExtIO
MX-CBL-MU-STR-EN-PG-5	5 m	MiniUSB straight > MiniUSB+ angled	D14/D15, S14/S15, V14/V15	MX-ExtIO
MX-CBL-MU-STR-EN-PG-2	2 m	MiniUSB straight > MiniUSB+ angled	D14/D15, S14/S15, V14/V15	MX-ExtIO
MX-CBL-MU-STR-EN-PG-05	0.5 m	MiniUSB straight > MiniUSB+ angled	D14/D15, S14/S15, V14/V15	MX-ExtIO
MX-CBL-MU-EN-PG-EN-PG-5	5 m	MiniUSB+ angled > MiniUSB+ angled	D24/D25 (NEW)	MX-ExtIO
MX-CBL-MU-EN-PG-EN-PG-2	2 m	MiniUSB+ angled > MiniUSB+ angled	D24/D25 (NEW)	MX-ExtIO
MX-CBL-MU-EN-PG-EN-PG-05	0.5 m	MiniUSB+ angled > MiniUSB+ angled	D24/D25 (NEW)	MX-ExtIO
MX-CBL-MU-EN-AB-5	5 m	MiniUSB angled > USB-A straight	M15, M24/M25, Q24/Q25, T24/T25	Ext. USB device
MX-CBL-MU-EN-AB-2	2 m	MiniUSB angled > USB-A straight	M15, M24/M25, Q24/Q25, T24/T25	Ext. USB device
MX-CBL-MU-EN-AB-05	0.5 m	MiniUSB angled > USB-A straight	M15, M24/M25, Q24/Q25, T24/T25	Ext. USB device
MX-CBL-MU-STR-AB-5	5 m	MiniUSB straight > USB-A straight	D14/D15, S14/S15, V14/V15	Ext. USB device
MX-CBL-MU-STR-AB-2	2 m	MiniUSB straight > USB-A straight	D14/D15, S14/S15, V14/V15	Ext. USB device
MX-CBL-MU-STR-AB-05	0.5 m	MiniUSB straight > USB-A straight	D14/D15, S14/S15, V14/V15	Ext. USB device
MX-CBL-MU-EN-PG-AB-5	5 m	MiniUSB+ angled > USB-A straight	D24/D25 (NEW)	Ext. USB device
MX-CBL-MU-EN-PG-AB-2	2 m	MiniUSB+ angled > USB-A straight	D24/D25 (NEW)	Ext. USB device
MX-CBL-MU-EN-PG-AB-05	0.5 m	MiniUSB+ angled > USB-A straight	D24/D25 (NEW)	Ext. USB device

MiniUSB: Special Mx-MiniUSB plug for weatherproof device connection via MOBOTIX bayonet catch, straight (STR) or angled (EN)

MiniUSB+: MiniUSB plug with special MOBOTIX cable plug for weatherproof device connection, straight (STR) or angled (EN)

USB-A: Straight USB-A socket for (not weatherproof as standard) connecting external USB devices with USB-A socket (ext. USB device)



7. Schedule

The following products can be ordered from now onwards:

- M15D-Thermal thermographic camera with thermal sensor module L43, L65 or L135
- M15D Complete Sets Day Night
- BlockFlexMount sensor modules for all S15Ds
- D15D lens units with long-pass filter (LPF)
- Four-piece frame and housing for the IP Video Door Station
- New MOBOTIX connection cable for D24/D25

Products on the web (from February 5, 2014):

www.mobotix.com > Products (for hardware)

www.mobotix.com > Support > Software Downloads > Cameras (for software)

Manuals/quick installation guides for new hardware:

www.mobotix.com > Support > Manuals

Product training sessions:

New MxCampus training sessions are available from February 5, 2014.

Attention – Special Export Regulations For Thermal Cameras Apply!

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

- According to the currently applicable export regulations of the U.S.A. and the ITAR, cameras with thermographic image sensors or parts thereof must not be exported to countries embargoed by the U.S.A. or the ITAR. At present, this applies to the following countries: Syria, Iran, Cuba, North Korea and Sudan. The same export ban applies to all persons and institutions listed in "The Denied Persons List" (see www.bis.doc.gov, "Policy Guidance > Lists of Parties of Concern").
- Under no circumstances can the camera itself or its thermographic image sensors be used in the design, the development or in the production of nuclear, biological or chemical weapons or in the weapons themselves.