## 1) New MOBOTIX 6MP Moonlight Technology

### Perfect Coordination: The Latest MOBOTIX 6MP Image Sensor Generation, MxLEO and HD Premium Lenses

One important feature that determines the quality of a security camera is its light sensitivity. A highly light-sensitive camera supports short exposure times, thus resulting in reduced motion blurring. This makes it easier to evaluate security-relevant footage, making details visible without the need for additional, expensive illumination.

**MOBOTIX 5MP Image Sensor Technology Represented An Inspired Leap In Camera Quality**

The MOBOTIX cameras with 5-megapixel sensors introduced in 2013 are significantly more light sensitive than the previous 1- and 3-megapixel cameras and deliver top quality at shorter exposure times, even in low lighting conditions. The 5-megapixel camera line uses only 1/100 second, whereas the older series used an exposure time of 1/10 second.

**Next Milestone On The Quest For Ever Better Images: Camera-Integrated MxLEO Noise Reduction**

The 5-megapixel camera line was the first to feature MxLEO software for image improvement in very low lighting conditions, thus further reducing motion blurring. In addition, the current MOBOTIX models have a hardware-based noise filter directly at the image sensor. It reduces image noise and delivers sharper images. Depending on the specific requirements, it is possible to select whether the automatic exposure function extends the calculated exposure time, for example, in order to create high-contrast night recordings for web images, or shortens the exposure time in order to display fast movements in crystal clear quality.

**A New Benchmark For Security Cameras: MOBOTIX 6MP Moonlight Sensor Technology (3072 × 2048 Pixels)**

The new MOBOTIX 6-megapixel image sensors (available as a day and night version for color and black/white images) feature even better light sensitivity, making these the best MOBOTIX cameras and IP systems ever. In addition to standard 4:3 image formats with maximized 5MP resolution, this new technology now also supports images with up to 6 megapixels in the special 3:2 format (3072 × 2048 pixels), both as a day and night sensor module. In dual image display mode, a MOBOTIX 6MP dual camera can generate images up to 12 megapixels in size.

Thanks to the fact that a 6-megapixel night sensor module MOBOTIX camera is now able to deliver high-quality images **on full moon nights (illumination of approx. 0.25 lux)** without any additional lighting, this new moonlight technology is suitable for applications with illumination levels below 5 lux (in comparison, street lighting seldom drops below 10 lux). For scenarios with normal lighting conditions, such as illuminated indoor and outdoor areas, the available 5-megapixel camera models are sufficient.

The greatly increased light sensitivity of the new sensor technology is further enhanced by the **HD Premium lenses** also built into the 5-megapixel cameras. These new HD Premium lenses with an f/1.8 aperture are offered in six different focal lengths. This technology, in connection with the new 6-megapixel sensor modules (1/1.8" CMOS), delivers **horizontal image angles between 15° and 105°** for an image format of 4:3.

**M15D And D15D With 6MP Sensors Available Now**

As MOBOTIX launches their new camera technology, initially the **M15D and D15D** dual camera models will ship with 6-megapixel sensor modules/lens units. At a later point, all sensor modules and the remaining camera models (single lens and dual lens) will be available as 5- and 6-megapixel versions. It will also be possible to update the firmware of current M15D, D15D and S15D camera modules in the near future to make them compatible with 5- and 6-megapixel sensor technology.

## Lens Table For M15D And D15D With 6MP Image Sensor Modules (1/1.8" CMOS)

MOBOTIX HD Premium lenses L20–L135 (aperture f/1.8), image format 4:3

| Lens Designation (abbreviated) | L20 | L22 | L32 | L43 | L65 | L135 |
|---|---|---|---|---|---|---|
| **Horizontal image angle** | **105°** | **90°** | **60°** | **45°** | **31°** | **15°** |
| Vertical image angle | 77° | 67° | 45° | 34° | 23° | 11° |
| Focal length, 35-mm equivalent | 20 mm | 22 mm | 32 mm | 43 mm | 65 mm | 135 mm |
| **At 1 m distance** | | | | | | |
| **Image width, m** | 2.5 | 2.0 | 1.2 | 0.8 | 0.6 | 0.3 |
| **Image height, m** | 1.6 | 1.3 | 0.8 | 0.6 | 0.4 | 0.2 |
| **At 5 m distance** | | | | | | |
| **Image width, m** | 12.6 | 10.0 | 5.8 | 4.1 | 2.8 | 1.3 |
| **Image height, m** | 8,0 | 6.6 | 4.1 | 3.1 | 2.0 | 1.0 |
| **At 10 m distance** | | | | | | |
| **Image width, m** | 25.1 | 20.0 | 11.5 | 8.3 | 5.5 | 2.6 |
| **Image height, m** | 15.9 | 13.2 | 8.3 | 6.1 | 4.1 | 1.9 |
| **At 20 m distance** | | | | | | |
| **Image width, m** | 50.3 | 40.0 | 23.1 | 16.6 | 11.1 | 5.3 |
| **Image height, m** | 31.8 | 26.5 | 16.6 | 12.2 | 8.1 | 3.9 |
| **At 50 m distance** | | | | | | |
| **Image width, m** | 125.7 | 100.0 | 57.7 | 41.4 | 27.7 | 13.2 |
| **Image height, m** | 79.5 | 66.2 | 41.4 | 30.6 | 20.3 | 9.6 |

**Note on L20 and L22 lenses:** slight vignetting effect may occur in the corners

# Product Announcement

Security-Vision-Systems MOBOTIX

| MOBOTIX 6MP Moonlight Sensor Technology – Highlights |
|---|
| The most light-sensitive MOBOTIX sensor lens technology ever |
| Very low illumination requirements for day sensor module: 0.1 lux at 1/60 s, 0.005 lux at 1/1 s |
| Very low illumination requirements for night sensor module: 0.02 lux at 1/60 s, 0.001 lux at 1/1 s |
| Up to 100 times higher light sensitivity compared to previous 1- and 3MP sensor technology |
| Expanded day sensor module range of applications |
| Shorter exposure times mean reduced motion blurring |
| High-quality premium lenses and optimized, balanced image quality with crisp detail right up to the image borders |
| Maximum image size: Now 6 megapixels for each sensor module in special format 3:2 (3072 × 2048 pixels) |
| Modular MOBOTIX cameras M15D, D15D and S15D now support 5- and 6-megapixel sensors |
| Current 5-megapixel camera technology is not replaced, but rather remains part of the MOBOTIX product range, offering premium technology for less critical lighting conditions (> 5 lux) |

All new MOBOTIX cameras equipped with 6-megapixel moonlight image sensor technology that are already available are listed in this product announcement, including order information. Additional 6-megapixel camera models and 6-megapixel sensor lens units installable as single-component upgrades have not been released yet and will be announced separately.

## 2) M15D Complete Sets (Day & Night) With 6MP Sensor Modules


### Ordering Information – M15D Complete Sets With Mounted 6MP Sensor Modules:

| Order Number | EAN | Description | MSRP in EUR | Available as of |
|---|---|---|---|---|
| MX-M15D-Sec-DNight-D20N20-6MP-F1.8 | 4047438022996 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L20 HD Premium lens (f/1.8, horizontal image angle 103°) IP66 | 1.448 | now |
| MX-M15D-Sec-DNight-D22N22-6MP-F1.8 | 4047438023009 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L22 HD Premium lens (f/1.8, horizontal image angle 90°), IP66 | 1.448 | now |
| MX-M15D-Sec-DNight-D32N32-6MP-F1.8 | 4047438023016 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L32 HD Premium lens (f/1.8, horizontal image angle 60°), IP66 | 1.448 | now |
| MX-M15D-Sec-DNight-D43N43-6MP-F1.8 | 4047438023023 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L43 HD Premium lens (f/1.8, horizontal image angle 45°), IP66 | 1.448 | now |

| | | | | |
|---|---|---|---|---|
| MX-M15D-Sec-DNight-D65N65-6MP-F1.8 | 4047438023030 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L65 HD Premium lens (f/1.8, horizontal image angle 31°), IP66 | 1.448 | now |
| MX-M15D-Sec-DNight-D135N135-6MP-F1.8 | 4047438023047 | M15D AllroundDual with two built-in 6MP sensor modules (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L135 HD Premium lens (f/1.8, horizontal image angle 15°), IP66 | 1.448 | now |

## 3) D15D Complete Sets (Day & Night) With 6MP Lens Units


### Ordering Information – D15D Complete Sets With Mounted 6MP Lens Units:

| Order Number | EAN | Description | MSRP in EUR | Available as of |
|---|---|---|---|---|
| MX-D15Di-Sec-DNight-D20N20-FIX-6MP-F1.8 | 4047438023238 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L20 HD Premium lens (f/1.8, horizontal image angle 103°) IP54 | 1.448 | now |
| MX-D15Di-Sec-DNight-D22N22-FIX-6MP-F1.8 | 4047438023245 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L22 HD Premium lens (f/1.8, horizontal image angle 90°), IP54 | 1.448 | now |
| MX-D15Di-Sec-DNight-D32N32-FIX-6MP-F1.8 | 4047438023252 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L32 HD Premium lens (f/1.8, horizontal image angle 60°), IP54 | 1.448 | now |
| MX-D15Di-Sec-DNight-D43N43-FIX-6MP-F1.8 | 4047438023269 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L43 HD Premium lens (f/1.8, horizontal image angle 45°), IP54 | 1.448 | now |
| MX-D15Di-Sec-DNight-D65N65-FIX-6MP-F1.8 | 4047438023276 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L65 HD Premium lens (f/1.8, horizontal image angle 31°), IP54 | 1.448 | now |
| MX-D15Di-Sec-DNight-D135N135-FIX-6MP-F1.8 | 4047438023283 | D15D DualDome with two built-in 6MP lens units (max. 3072 × 2048 pixels): 1 × day, 1 × night, each with L135 HD Premium lens (f/1.8, horizontal image angle 15°), IP54 | 1.448 | now |

**D15D protection classes:** IP54/IK10 without accessories, IP65/IK10 with Outdoor Wall Mount, IP66/IK10+ with Vandalism Set, each for use at ambient temperatures from -30 °C to +60 °C (-22 °F to 140 °F)