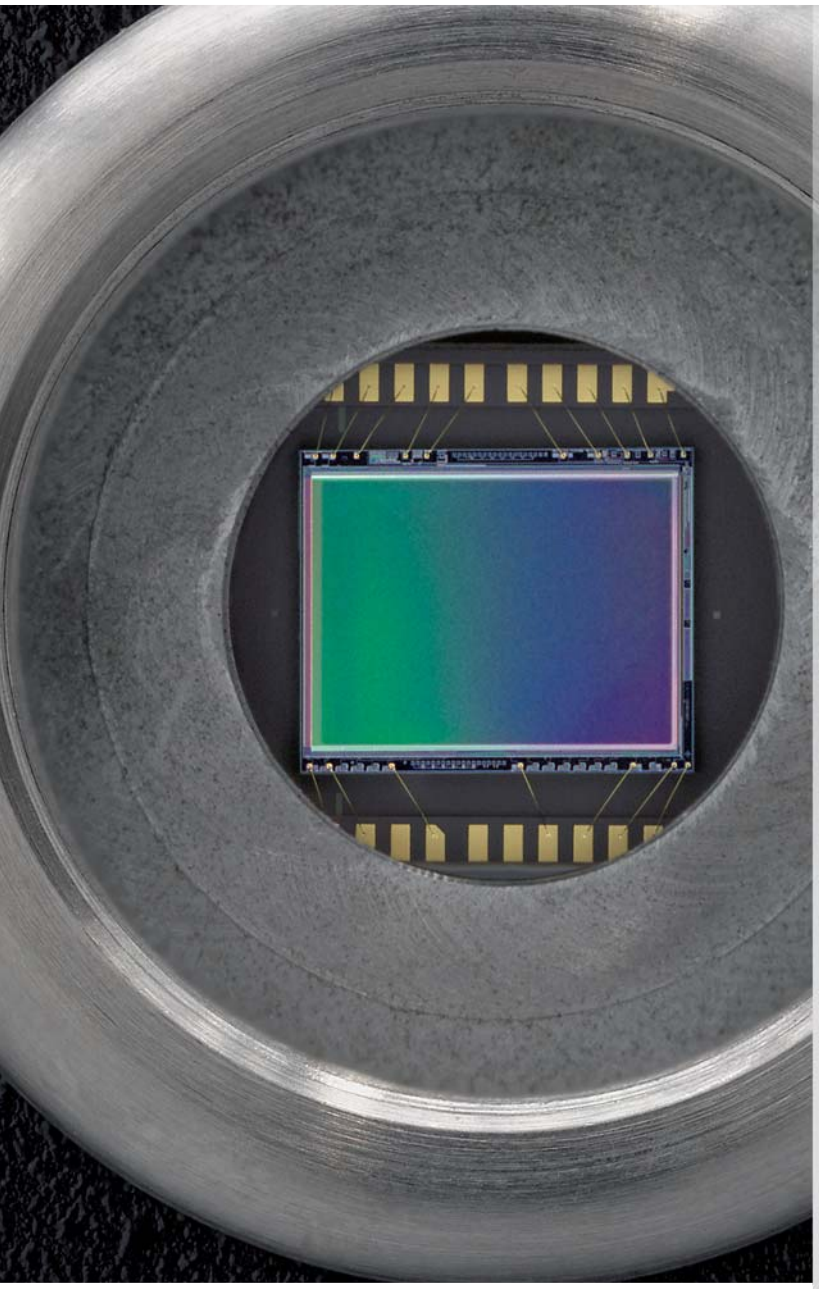
metrolux

ML3743

Beam Diagnostic Systems



- **Optimized for laser beam profiling**
- **Reticle on the front**
- **High resolution**
- **High dynamic**
- **CE / UL certified**
- **Many accessories**

Everything can be improved • We give you a tool to be faster

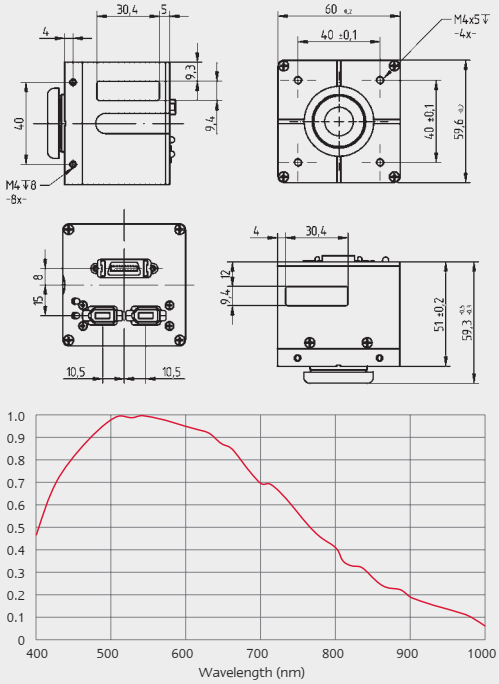
camlux camera

Our new **camlux** ML3743 is optimized for laser beam analysis. In its standard version the CCD window is removed to avoid interference fringes.

An additional N/D filter wedge is placed in front of the CCD for protection. Its small pixel size and high dynamic range give a clear image of your laser beam especially of higher modes that could not be seen before.

Comprehensive accessories extent the working range to almost all laser beam diameters, EUV-NIR wavelengths and all power/energy densities. The IEEE1394 interface is industry standard and therefore the camera can be used in production and quality control for reliable measurements.

Chip size 8,97 x 6,71 mm



Camera specifications:

CCD-Sensor	2/3"
Pixel #	1392 x 1040
Pixel size	6.45 x 6.45 µm²
Array size	8.97 x 6.71 mm²
max. frame rate	14.8 fps 60 fps with binning
Exposure time	20 µs - 1 s
long-time exposure	up to 20 min
Binning	x2, x4, x8
S/N ratio	63 dB
Dynamic	12 bit
Dynamic with binning	15 bit
Full well capacity	18000 e^-
Laser beam diameter	< 5 mm

larger diameter with optional extension tubes. Small diameters 5 µm – 100 µm with optional near field lenses.

Size	60 x 60 x 60 mm³ // 2,36 x 2,36 x 2,36 inch³
Weight	0.3 kg
Interface	IEEE1394 FireWire

Different options for adaptation to opto-mechanical components. C-Mount adapter for objectives, stackable neutral density filters and extension tubes.

Working range:

Wavelength range	320 - 1100 nm
with UV-converter	110-320 nm
Saturation, CW:	800 µW/cm² @ 532 nm
	12 mW/cm² @ 1064 nm
with N/D 4.0 filter	1 W/cm²
with polarlux attenuator	>10.000 W/cm²
minimum detectable signal	< 3 nW/cm²
Saturation, pulsed (20 ns,1 Hz)	14 nJ/cm² @ 532 nm
	240 nJ/cm² @ 1064 nm
with N/D 4.0 filter	> 140 µJ/cm²
with polarlux attenuator	>10 J/cm²
minimum detectable signal	< 280 pJ/cm²
damage threshold:	ca. 20 x saturation @ 320 – 400 nm
	ca. 200 x saturation @ 400 – 1100 nm

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