



SWIR range



Dimming
Control

Full range of SWIR wavelengths: From 1000nm to 1700nm

Ideal for InGaAs cameras

Available from 100mm x100mm to 300mm x300mm

Long lifetime and minimal maintenance

Standard connections and fasteners

Electronics	Connectors	M12 - 4 pins
	Power supply	24V DC $\pm 10\%$
	Electronical mode	AIC (Analog intensity control) for dimming control [0-24V] – Analog voltage
	Power consumption	Depends on the dimensions (See page 3)
	Cable length	500mm
Optics	Wavelength	1050 nm 1200 nm 1300 nm 1450 nm 1550 nm 1650nm
	Illumination mode	Continuous or strobe mode
Mechanics	Weight	Depends on the dimensions
	Thickness	80mm
	Dimensions	See page 5
	Fastener	2 T-nut slot profile on two faces of the device
	Material	Device body: Aluminum Alloy & ABS; Window: PMMA
Environment	Working temperature	0°C to 50°C
	Storage temperature	-20°C to 70°C
	IP code	IP50

Applications

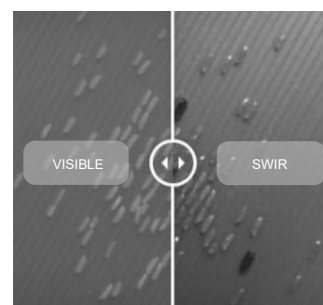
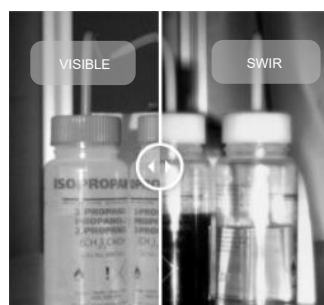
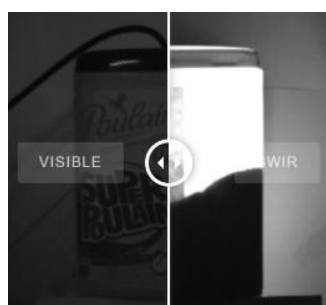
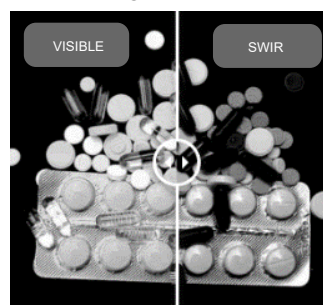


Typical SWIR applications:

Water detection

Silicon inspection

Vision through smoke



Part Number



Reference:

Standard Version: EFFI-MBL-XXX-YYY-ZZZZ

Power Version: EFFI-MBL-PWR-XXX-YYY-ZZZZ

XXX: Optical width (mm) & **YYY**: Optical length (mm) (**XXX** ≤ **YYY**)

Only the EFFI-MBL-100T-100 is a standard, other dimensions can be available upon request.

ZZZZ: Color / Wavelength (nm)

1050nm

1200nm

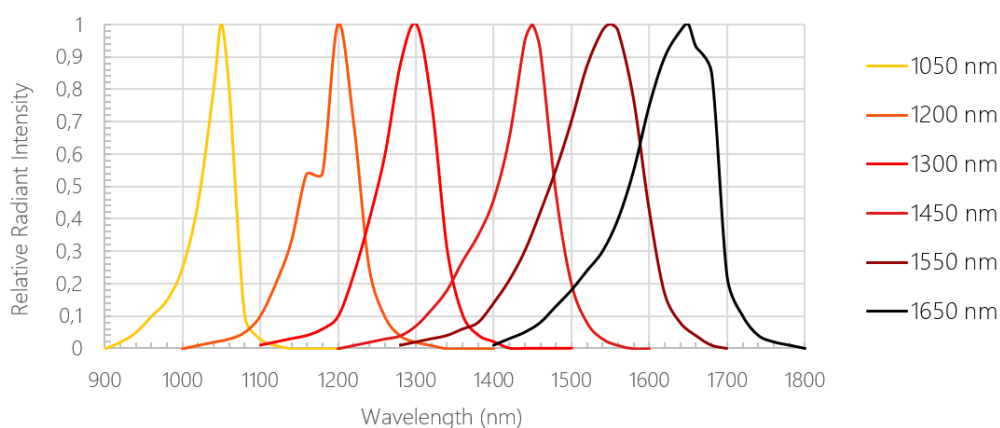
1300nm

1450nm

1550nm

1650nm

Available Wavelengths

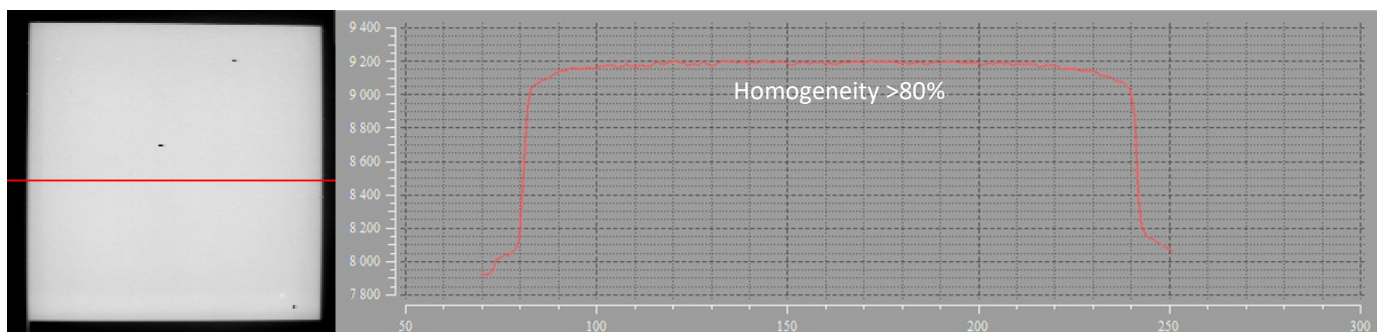


Other wavelengths available upon request.

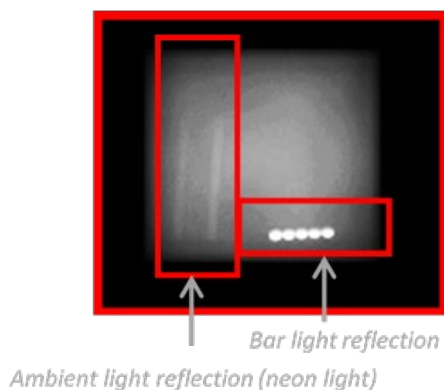
Optical considerations



Uniformity considerations



Anti-reflection system



EFFI-MBL : no reflection 



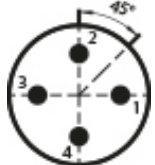
EFFI-BL has an anti-reflection system to absorb unwanted reflections from interfering light.

Electronical considerations



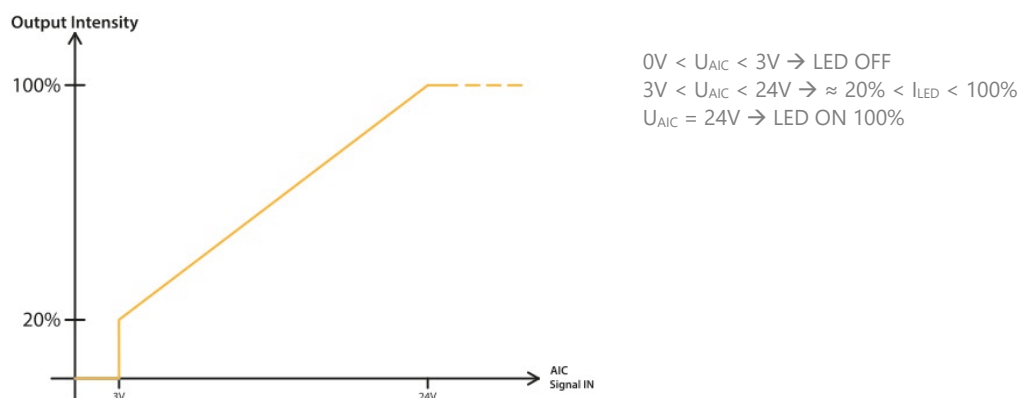
Contact arrangement

The EFFI-MBL is supplied with a 24V constant voltage. The AIC pin has to be connected.

CONTACT ARRANGEMENT	NUMBER	COLOR	DESIGNATION
 Male M12 - 4 pins	1	Brown	+24V
	2	White	n.a.
	3	Blue	GND
	4	Black	AIC: Analog Intensity Control for Dimming Control Max consumption 3mA Max 24V DC – Analog Voltage

Length M12 cable (Cable gland → Connector) : 500mm

Dimming control



Power Consumption

		Electrical Power consumption (W) for standard EFFI-MBL								
		Optical length (mm)								
		100	200	300	400	500	600	700	800	900
Optical width (mm)	100	7	14	21	28	35	42	49	56	63
	200	14	28	42	56	/	/	/	/	/
	300	21	42	63	/	/	/	/	/	/

Note: The power consumptions mentioned above are indications. As, apart from the 100T-100, products are only available upon request, please get in touch with Effilux for further information.

Mechanical considerations (Dimensions in mm)

