DATASHEET

Efficient Led Lighting

Convertible

Autostrobe feature

Flexible

Segmented light

High power

IP5X

effiSRING

Compact and flexible ring with a small compact dome

INTRODUCTION

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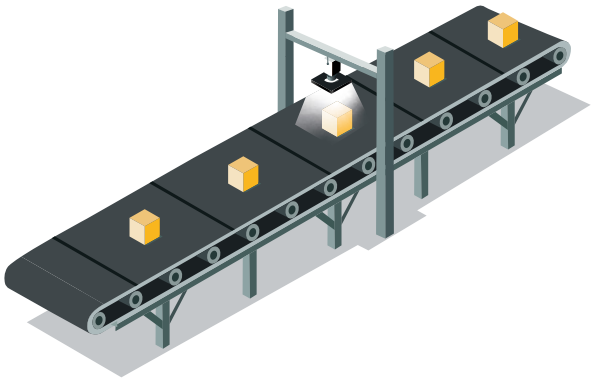
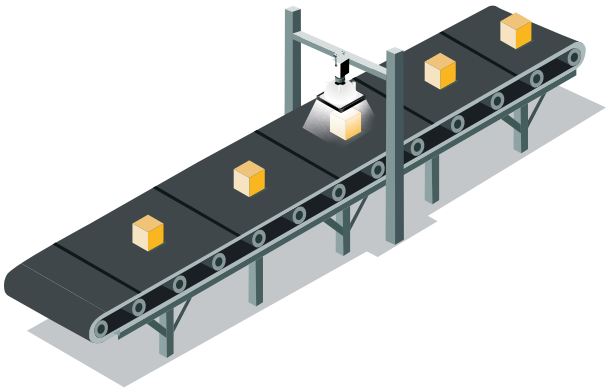
APPLICATIONS





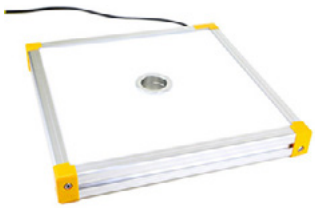
RELATED PRODUCT

Refer to the datasheets of the products below for more details on those related products.

EFFI-RING

Adjustable beam power ring

EFFI-FD



Flat Dome Light

PART NUMBERING

Standard version

EFFI-SRING	- XXX	- Z	- Z	- Z	- Z	WW
	Diameter of the LED ring (mm) 100	CH1 ● **B** (Blue) ● **G** (Green) ● **R** (Red) ● **IR** (Infrared) ○ **W** (White)	CH2 ● **B** (Blue) ● **G** (Green) ● **R** (Red) ● **IR** (Infrared) ○ **W** (White)	CH3 ● **B** (Blue) ● **G** (Green) ● **R** (Red) ● **IR** (Infrared) ○ **W** (White)	CH3 ● **B** (Blue) ● **G** (Green) ● **R** (Red) ● **IR** (Infrared) ○ **W** (White)	Windows* **TR** Transparent **SD** Semi-diffuse **OP** Opaline

Notes: If not specified, default opaline window.

Available versions & options

SDOME version

EFFI-SRING - SDOME - XXX - Z - Z - Z - Z - WW

- In this version, a small dome is added on top of the EFFI-SRING for a highly diffusive illumination.

Continuous version

EFFI-SRING - XXX - Z - Z - Z - Z - WW - CW

- In this version, the EFFI-SRing directly turns on at continuous intensity instead of the high power autostrobe.

Polarizer option

EFFI-SRING - XXX - Z - Z - Z - Z - TR - POL2

- Using the Polarizer accessory, it is possible to eliminate glare from the workpiece making it easier to acquire a suitable image for the application with no hot spot.

Diffuse film + polarizer option

EFFI-SRING - XXX - Z - Z - Z - Z - TR - DIF-POL2

- Use the diffuse film under the polarizer to eliminate even more the hot spots.

Kit option

EFFI-SRING - XXX - Z - Z - Z - Z - KIT

- This diffuser kit includes the different films and windows.
- It is also available with the SDOME version, it then includes the small dome to add on top of the EFFI-SRING.

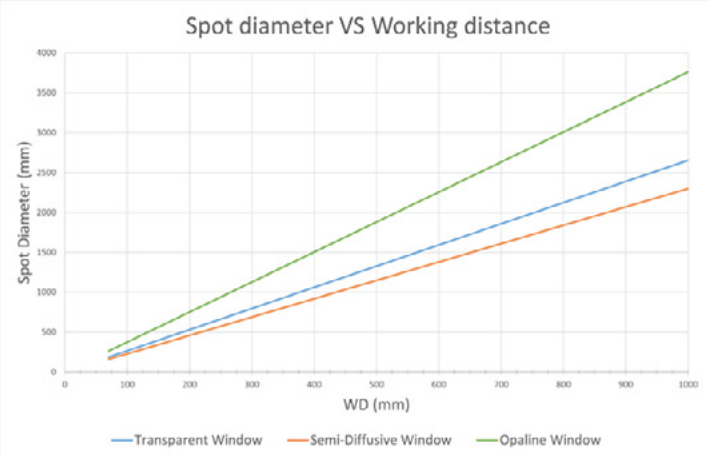
TECHNICAL SPECIFICATIONS

effiSRING

Illumination Mode	Strobe or continuous mode
Wavelengths	465nm, 525nm, 625nm, 850nm, White
Power Supply	24V DC
Connector(s)	**M12 - 8 pins**
Power Consumption per Channel	Depends of the wavelength
Weight	SRING: 300g SDOME: 750g
Thickness	SRING: 15mm SDOME: 69.9mm
Material	Device body: Aluminum; Windows: Acrylic
Fastener	Related to the dimensions
IP rating	IP5X
Operation environment	Temperature: 0°C to 40°C - Humidity: 20 to 85%RH (with no condensation) - Altitude: Up to 2000m
Storage environment	Temperature: -20° to 60°C - Humidity: 20 to 85%RH (with no condensation)
Informations	Overvoltage category I - Protective class III - Pollution degree 3
Regulations & Marking	CE - UKCA
Environmental Standards	RoHS Directives (2011/65/EU, 2015/863/EU and China RoHS) - REACH Regulation - WEEE Regulation
Country of Origin	France

OPTICAL SPECIFICATIONS

Illuminated spot diameter(1) vs working distance

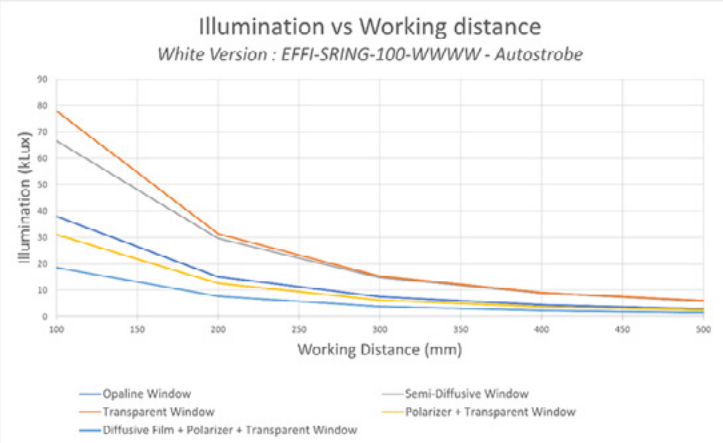


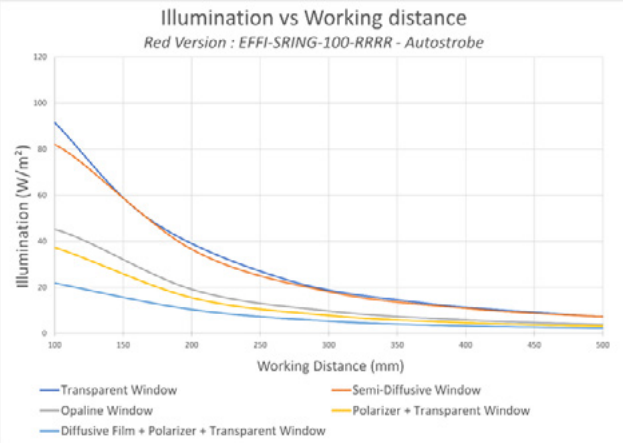
(1): From 50% to 100% of the peak value of illumination

Illumination vs working distance

Notes:

- Maximum illumination at the center of the spot
- Ratio between overdrive strobe mode and continuous mode : X4



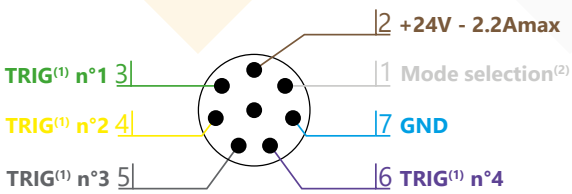


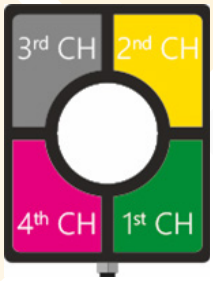
Color	INFRARED (850nm)	RED (625nm)	GREEN (525nm)	BLUE (465nm)
Power factor between the different wavelength	X2.3	X2	X1	X1.1

ELECTRONICAL SPECIFICATIONS

Contact Arrangement

M12 8pins - male connector





Notes:

- (1): max 24V
- (2): To select between PNP and NPN mode. If the pin 1 «Mode selection» is:
  Not connected: PNP mode → Light ON when V_{TRIG} > 2.5V
  Connected 24V: NPN mode→ Light ON when V_{TRIG} < 1V
- The EFFI-SRing / EFFI-SDome requires 24V DC input power.
- The trigger pin of each channel needs to be connected either to the 24V DC signal for Continuous mode or to a PNP Trigger signal for Overdrive strobe mode.

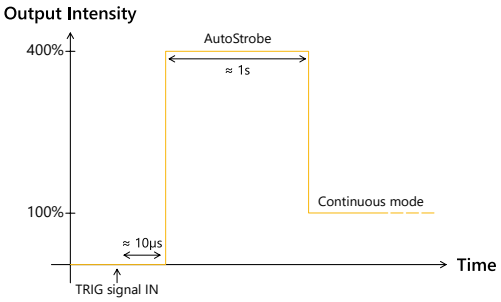
Power Comsumption (based on white led)

Peak power in autostrobe	Continuous
45W	10W

Signal Consumption

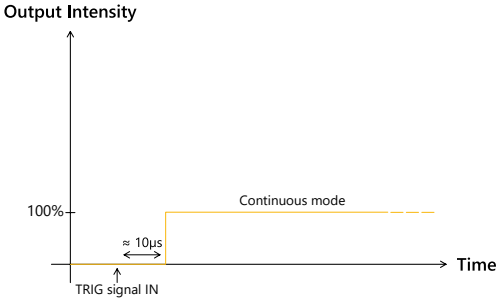
Mode selection consumption (pin1)	TRIG consumption (pins 3, 4, 5 and 6)
0.5mA max	0.1mA max on each pin

Autostrobe



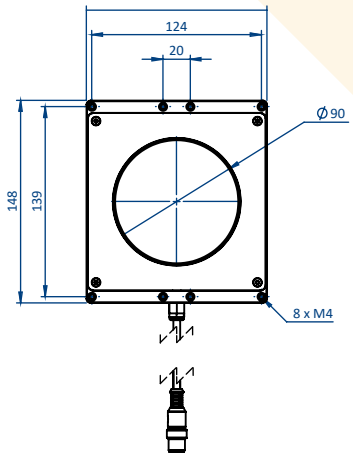
Please respect a duty cycle of 25% maximum. Duty cycle = (T_{ON} / (T_{ON} + T_{OFF}))

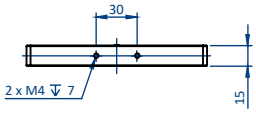
Option: Continuous Version

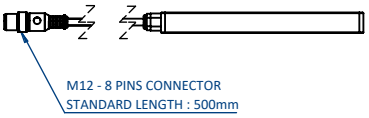


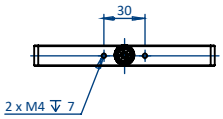
MECHANICAL SPECIFICATIONS

EFFI-SRING CONFIGURATION

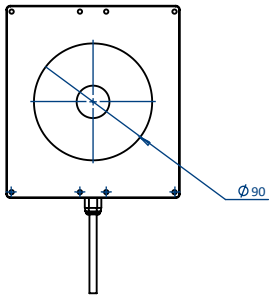


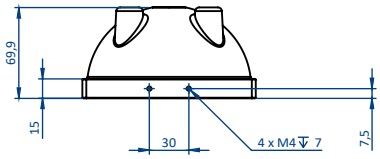


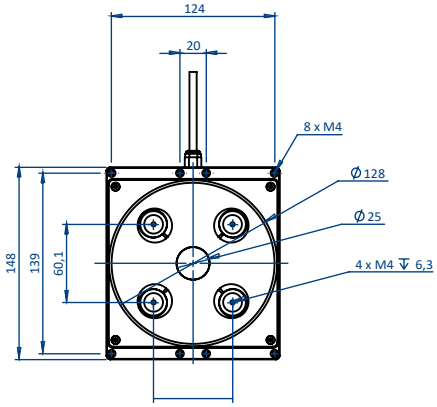




EFFI-SDOME CONFIGURATION







ACCESSORIES

Please refer to the specific documentation for additional information on the accessories of the EFFI-SRING-SDOME.

Extension cables

M12
2meters: EFFC-CAB-M12-FM-8-DD-L2
5meters: EFFC-CAB-M12-FM-8-DD-L5
10meters: EFFC-CAB-M12-FM-8-DD-L10

SWITCH 4 Channel

M12
2meters: EFFC-CAB-M12-FM-5-DD-L2
5meters: EFFC-CAB-M12-FM-5-DD-L5
10meters: EFFC-CAB-M12-FM-5-DD-L10

Camera mounting

EFFM-1-HORI-STEEL-V2
EFFM-1-VERT-STEEL-V2

CONTACT INFORMATION

Please refer to the specific documentation (datasheet, user manual and drawing) for complementary information. Contents of this document are based on information available as of April-2025 and may be changed without prior notice.

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