



Homogeneous

LED projector

Edges detection

Collimated light

IP5X

CE

effiTELE

Uniform telecentric light

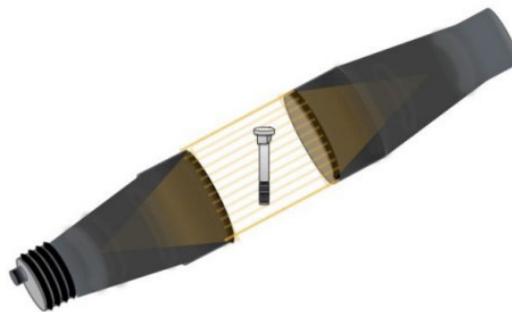
INTRODUCTION

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APPLICATIONS

EFFI-Telecentric is a telecentric LED lighting (parallel light output) for the measurement and edges detection of objects with great accuracy. It is used either by backlighting or associated with a coaxial system.



PART NUMBERING

STANDARD VERSION

EFFI-TELE - XX - ZZZ

Optical diameter	Wavelength [nm]
20 123 mm	● 405 (UV)
45 144 mm	● 465 (Blue)
	● 525 (Green)
	● 625 (Red)
	● 850 (Infrared)
	○ 000 (White 5500K)

AVAILABLE OPTIONS

STR option

EFFI-TELE - XX - ZZZ - STR

- The direct current option gives a full control over the current sent in the LEDs. It allows strobing and more light power.
- Warning: There is no LED protection

Polarizer option

EFFI-TELE - XX - ZZZ - POL

- 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.

TECHNICAL SPECIFICATIONS



Illumination Mode	Continuous or strobe	
Wavelengths	365nm, 405nm, 465nm, 525nm, 625nm, 850nm (+/- 5nm) White (5500K ±500K)	
Power Supply	24V DC	
Connector(s)	M12 - 5 pins (LED driver)	M8 - 3 pins (Direct current)
Power Consumption	5W	
Analog Intensity Control (AIC)	The output optical power is adjustable from 20% to 100% by applying a signal from [5V-24V DC] Total voltage range [0V-24VDC] / Don't exceed 24V DC / Max. signal consumption: 4mA	
Weight	Max: 250g	
Dimensions	Depends on the version	
Material	Device body: Aluminum alloy	
Fastener	4X M4 holes on the side of the device	
IP rating	IP54	
Operation environment	Temperature: 0°C to 50°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	

ELECTRONICAL CONSIDERATIONS

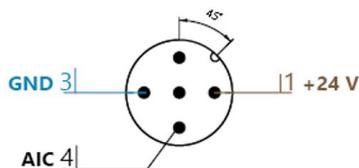
POWER CONSUMPTION & CONTACT ARRANGEMENT

The average power consumption is:

- For the standard version: 5W
- For the power version: 15W
- For the STR option, the power consumption depends on the intensity which flows in the LED.

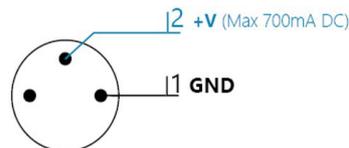
Depending on the chosen configuration (with or without LED driver), the light comes with different connectors.

With LED driver



Without LED driver = STR

Expert mode: LED are wired directly to the M8 without protection



Max input intensity 700mA

Notes: The EFFI-TELE requires 24V DC input power.

MODE CONTROL

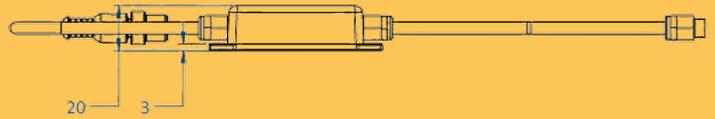
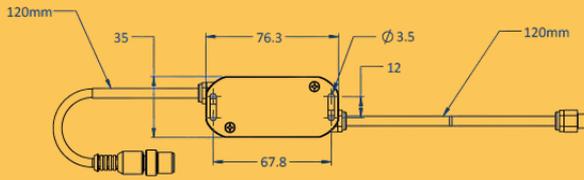
3 options are available:

Chosen option	With LED driver (Dimmable continuous)	Without LED driver = STR (Dimmable continuous)																		
Dimmable continuous		<p>Standard version :</p> <p>Power version :</p>																		
Strobe	Not available	<table border="1"> <thead> <tr> <th>Current</th> <th>Max pulse duration (µs)</th> <th>Duty cycle</th> </tr> </thead> <tbody> <tr> <td>1.2A</td> <td>50 000</td> <td>0.5</td> </tr> <tr> <td>1.5A</td> <td>10 000</td> <td>0.1</td> </tr> <tr> <td>2A</td> <td>1000</td> <td>0.01</td> </tr> <tr> <td>2.5A</td> <td>100</td> <td>0.001</td> </tr> <tr> <td>3.5A</td> <td>40</td> <td>0.0004</td> </tr> </tbody> </table>	Current	Max pulse duration (µs)	Duty cycle	1.2A	50 000	0.5	1.5A	10 000	0.1	2A	1000	0.01	2.5A	100	0.001	3.5A	40	0.0004
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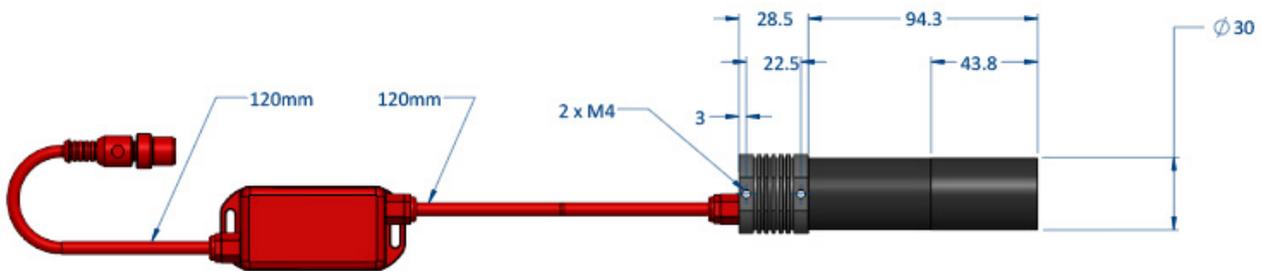
OVERVIEW

For the two existing versions of the EFFI-TELE (XX =20/45), two configurations exist either M12 (with LED driver) or M8 (without LED driver).

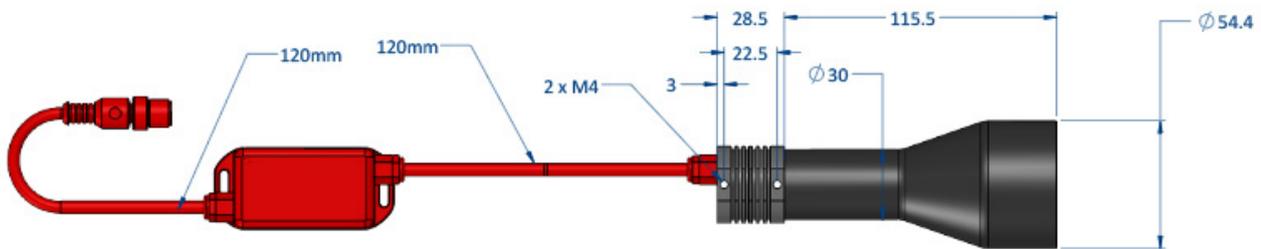
In every sketch, the red part corresponds to the M12 configuration and should be replaced by a M8 connector for the corresponding configuration. Here are the dimensions of the red part.



EFFI-TELE-20-ZZZ



EFFI-TELE-45-ZZZ



ACCESSORIES

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



Fasteners

Clamping: EFFM-1-0001
Pivot joint: EFFM-1-0009
Tripod adapter: EFFM-1-0027



Pulse controller

Pulse controller
EFFI-IPSC4
Cables
2 meters: EFFC-CAB-M8-SUBD-FM-3-DD-L2
5 meters: EFFC-CAB-M8-SUBD-FM-3-DD-L5
10 meters: EFFC-CAB-M8-SUBD-FM-3-DD-L10



Extension cables

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
M8
2meters: EFFC-CAB-M8-F-3-D-L2
5meters: EFFC-CAB-M8-F-3-D-L5
10meters: EFFC-CAB-M8-F-3-D-L10

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 January 2025 and may be changed without prior notice.



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