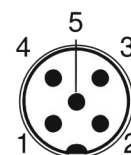


### LED STATUS

Led Status	Internal controller with 4 driving modes	
1	100%	Continuous use
2	200%	Semi-continuous use
3	400%	Strobe use
4	10-100%	Analog Reg

Internal Controller with  
**4 driving modes**



M12 5P Male Connector

Pin 1	+24V
Pin 2	Start NPN < 1 to 0V
Pin 3	GND
Pin 4	Start PNP > 3 to 24V
Pin 5	1-10V Analog Reg.

Develop your custom solution

18 Standard Colours

Base IP54 Protection Degree

Variant IP65 Protection Degree

CE RoHS

24 Vdc

Optional Polarizing Filter

### Illuminator Features :

- Project achieved by internal resources and Genesi skills;
- Fast controller which allows to have the following modes: continuous use, semi-continuous use, strobe (PNP, NPN), analog regulation.
- Microcontroller to monitor the pulse duration and the maximum temperature;
- Model with 10°, 30°, 60° Lenses or transparent, satin and opaline covers;
- Powerful and Fast strobe mode with energy buffering and strobe duration control, min. pulse from 3 µs;

COLOUR	WHITE		UV-A				VISIBLE				NIR			SWIR				
Led Colour	White 6000K	White 4000K	UV 365nm	UV 385nm	UV 395nm	UV 405nm	Blue 450nm	Green 530nm	Red 625nm	Deep Red 660nm	IR 730nm	IR 850nm	IR 950nm	SWIR 1050nm	SWIR 1200nm	SWIR 1300nm	SWIR 1450nm	SWIR 1550nm
	-6K	-4K	-365	-385	-395	-405	-470	-524	-625	-660	-730	-850	-950	-1050	-1200	-1300	-1450	-1550
Continuous use power	100 %		175 %				200 %				200 %			200 %				
Semi-continuous use power	200 %		175 %				200 %				200 %			180 %				
Strobe use power	400 %		330 %				400 %				400 %			400 %				



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# GP Part Number

Ex. Code : **GPXXX** -**YYY** -**WW1** -**WW2**

XXX	Base Lengths	-YYY	Led Colours		EN 62471	-WW1	Cover variants
GP06	6 cm	-6K	Base 6000K Cold White	White	RISK1	-L10	Base Trasparent cover
GP12	12 cm	-4K	4000K Natural White			RISK2	-OP
GP23	23 cm	-365	UV 365 nm	UV - A	RISK3	-ST	Satin cover
GP36	36 cm	-385	UV 385 nm				
GP46	46 cm	-395	UV 395 nm				
GP56	56 cm	-405	UV 405 nm				
GP66	66 cm	-450	450 nm Royal Blue	Visible	RISK2	-T65	Transparent cover IP65
GPXXX	From 6 cm to 300 cm on demand	-524	524 nm Green		RISK1	-L10	10° lens, trasparent cover
		-625	625 nm Red	Nir	RISK2	-L30	30° lens, trasparent cover
		-660	660 nm Deep Red				
		-730	730 nm IR				
		-850	850 nm IR	Swir	RISK2	-L60	60° lens, trasparent cover
		-950	950 nm IR				
		-1050	1050 nm SWIR				
		-1200	1200 nm SWIR				
		-1300	1300 nm SWIR				
		-1450	1450 nm SWIR			-TP	Polarizing filter + Trasparent cover
		-1550	1550 nm SWIR			-OPP	Polarizing filter + Opaline cover
		-YYY	Colour on demand			-WW1	Cover on demand
						-WW2	Cables
							20cm cable + M12 5P M
						-WW2	Cable on demand

Not all combinations are available

## Part Number Examples:

### GP23-6K-T

power bar 4 Driving Modes 23 cm White 6000K Transparent cover  
2160/14400Lm 0,6/4A 14/96W 20cm cable M12 M 5P

### GP36-365-45T

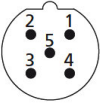
power bar 4 Driving Modes 36 cm UV365nm 45° lens + transparent  
Cover 0,9/2,7A 22/65W 20cm cable M12 M 5P

### GP102-850-OP

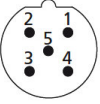
power bar & backlight 4 Driving Modes 102 cm IR 850nm Opaline cover  
1/3,2A 24/77W 20cm cable M12 M 5P

# OPERATING MODE

## 100% CONTINUOUS USE

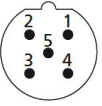
Connector	PINS	Function	Description
	1	+24 V	A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V;  For the continuous use: it is possible to connect PIN4 directly to +24 V or PIN2 to GND
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	-	

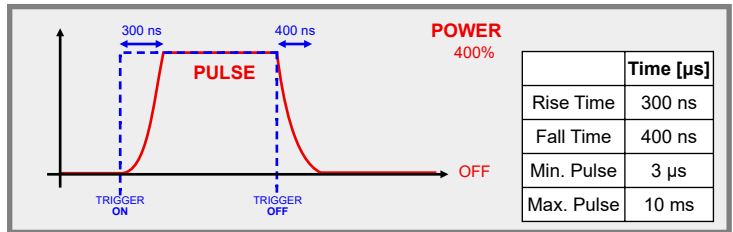
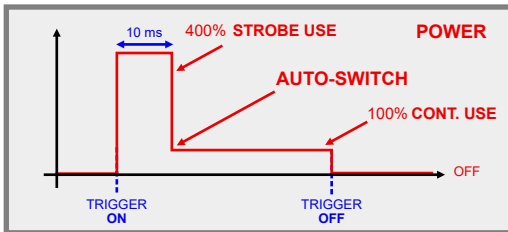
## 200 % SEMI-CONTINUOUS USE

Connector	PINS	Function	Description
	1	+24 V	<b>Precondition:</b> PIN5: 24 V A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V;  <b>In this mode → Ton<sub>max</sub> = 60 s - Dt<sub>max</sub> = 50%</b>  For the semi-continuous use: it is possible to connect PIN4 directly to +24 V or PIN2 to GND.  To use it in continuous mode with DT <sub>max</sub> from 51% to 100%: it is necessary to use the heat sink or forced ventilation.
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	+24 V	

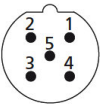
## 400% STROBE USE



Connector	PINS	Function	Description
	1	+24 V	A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V;  <b>In this mode → Ton<sub>max</sub> = 10 ms - Dt<sub>max</sub> = 10%</b>  AUTO-SWITCH in continuous use.
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	-	



## ANALOG REGULATION USE 100%

Connector	PINS	Function	Description
	1	+24 V	PIN5 from 1 to 10 V can adjust the power from 10% to 100%.
	2	-	
	3	GND	
	4	-	
	5	1 V - 10 V	



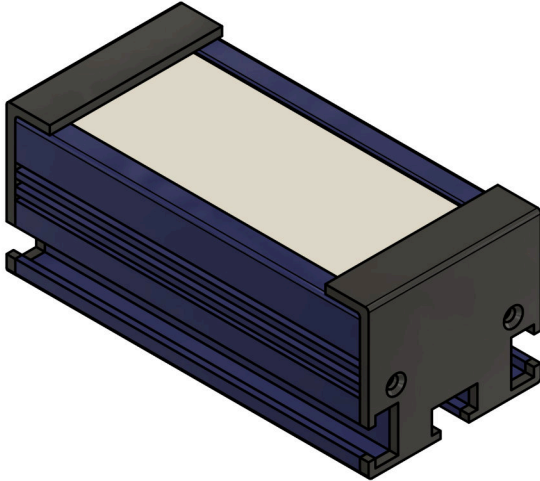
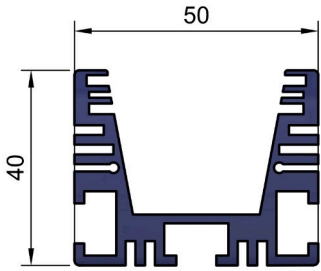
400% STROBE USE POWER can be reached only from WHITE / VISIBLE / NIR LEDs, for other wavelengths check the power table at page 1.



MicroController temperature protection → at 80°C the PCB enables the protection and restores the functioning at T < 60°C.

# MECHANICAL DRAWING

Scale	Unit of measurement
1:2	mm
<b>Weight GP12</b>	
275 g	
<b>Weight GP23</b>	
430 g	
<b>Weight GP66</b>	
1.243 Kg	



For 3D mechanical drawing requests - [info@genesi-lux.it](mailto:info@genesi-lux.it)

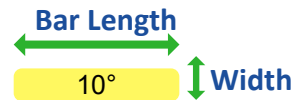
90°

## LIGHT PROJECTION

- T		
Working distance	Width mm	Power W/m <sup>2</sup>
20 cm	TBD	TBD
40 cm	TBD	TBD
100 cm	TBD	TBD

60°

30°



- ST		
Working distance	Width mm	Power W/m <sup>2</sup>
20 cm	TBD	TBD
40 cm	TBD	TBD
100 cm	TBD	TBD

- L60		
Working distance	Width mm	Power W/m <sup>2</sup> Continuous-Semi-cont.-Strobe
20 cm	TBD	TBD
40 cm	TBD	TBD
100 cm	TBD	TBD

- L30		
Working distance	Width mm	Power W/m <sup>2</sup> Continuous-Semi-cont.-Strobe
20 cm	TBD	TBD
40 cm	TBD	TBD
100 cm	TBD	TBD

- L10		
Working distance	Width mm	Power W/m <sup>2</sup> Continuous-Semi-cont.-Strobe
20 cm	50	430-790-1580
40 cm	110	230-430-860
100 cm	200	95-173-346

- OP		
Working distance	Width mm	Power W/m <sup>2</sup> Continuous-Semi-cont.-Strobe
20 cm	270	19-37-74
40 cm	540	5,3-10,4-21
100 cm	1300	1-1,8-3,6

- OP BACKLIGHT FUNCTION	
Working Distance	Luminance cd/m <sup>2</sup> Continuous-Semi-cont.-Strobe
On Surface	48.000-88.000-115.000
homogeneity ± 5% for width 35 mm	

Powers related to the white colour homogeneity: ± 5%



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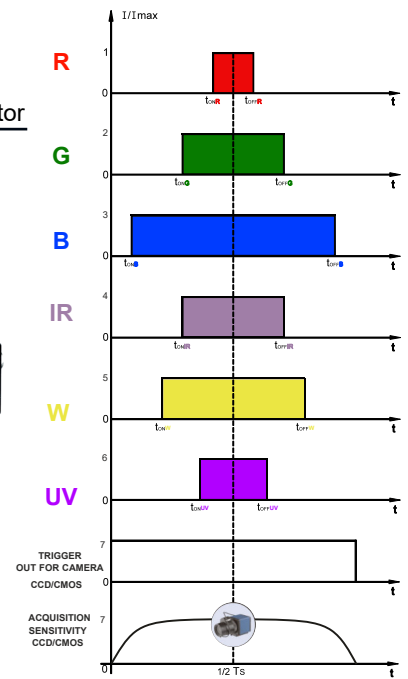
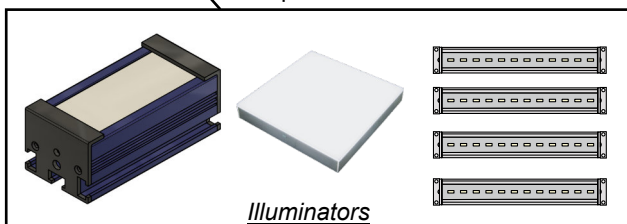
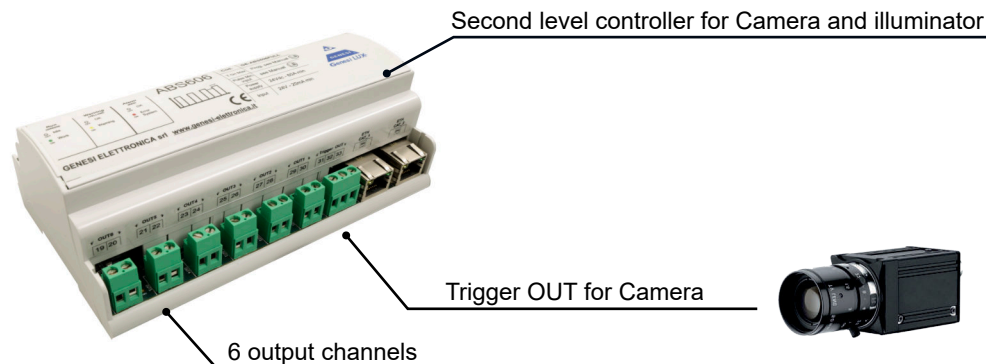
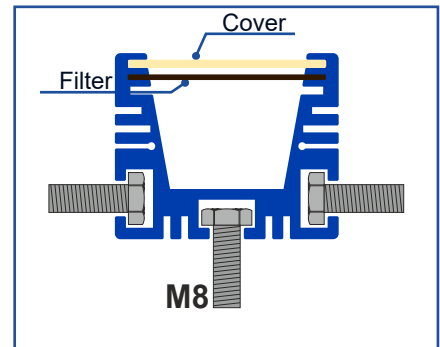
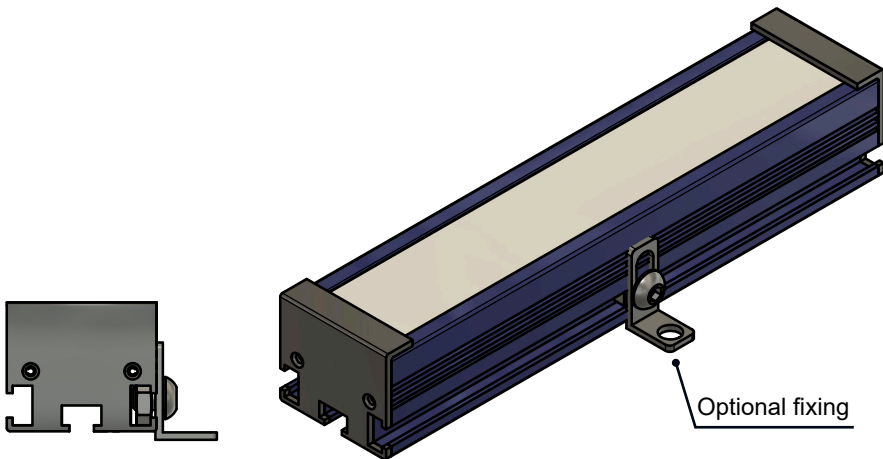


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# ACCESSORIES

CODE	DESCRIPTION
GP-FIX	GP fixing kit (2pz)
GP-FIX-R	Rotating GP fixing kit (2 pz)
GP12-P-C0	accessory GP12 Polarizing filter 0 degree cut
GP23-P-C0	accessory GP23 Polarizing filter 0 degree cut
GP36-P-C0	accessory GP36 Polarizing filter 0 degree cut
GP46-P-C0	accessory GP46 Polarizing filter 0 degree cut
GP56-P-C0	accessory GP56 Polarizing filter 0 degree cut
GP66-P-C0	accessory GP66 Polarizing filter 0 degree cut
GE-M12F-5X050-2M	M12 connector 2 meter long female PVC cable
GE-M12F-5X050-5M	M12 connector 5 meter long female PVC cable
GE-M12F-5X050-10M	M12 connector 10 meter long female PVC cable
GE-ABS606E	LED Voltage Controller with 6 programmable channels and 10/100 Ethernet. Second level controller for Camera and illuminator.

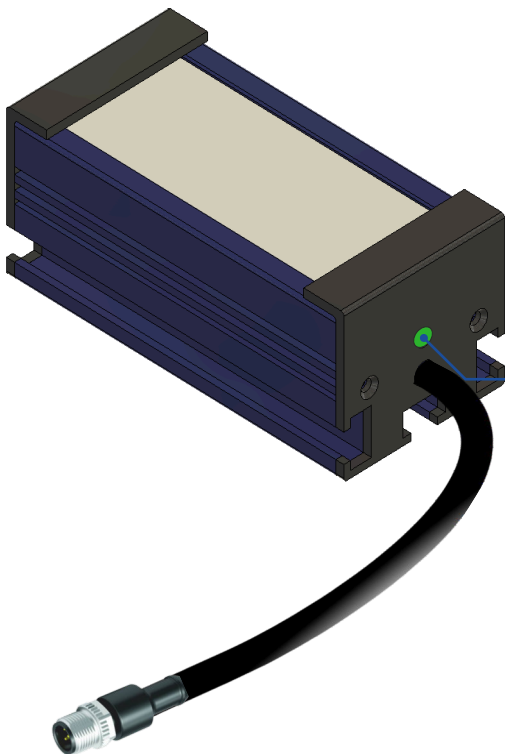




## Tailor-Made

Connector	PINS	Function	Description
M12 Male	1		
	2		
	3		
	4		
	5		

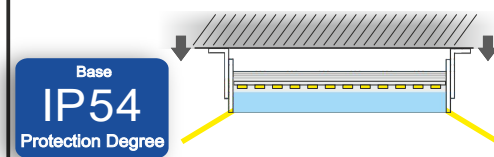
## DEVELOP YOUR CUSTOM PRODUCT WITH OUR R&D TEAM



### LED STATUS

Mode	Led colour signal	Function/note
Powered	Blue	-
100% Continuous use	Green	-
0-100% Analog Reg	Yellow	-
400% Strobe Use	Fast blinking green	-
200% Semi-continuous use standby	Purple	Without PNP or NPN input only +24V analog IN
200% Semi-continuous use	Slow blinking purple	With PNP o NPN input +24V analog IN
Over 10% ton error	Fast blinking red	10 sec stop
Over 80° temperature in pcb controller	Slow blinking green-yellow-red	Up to < 60° stop

The indicated IP protection degree is guaranteed only if the product is positioned downward



#### STANDARDS

EMC immunity :	EN 61547:2009	
EMC emission :	EN 55015:2013 + A1	
Photobiologic risk :	EN 62471:2008 GLS: RISK 1	<b>Only for white light, continuous use</b>
Assessment of lighting equipment related to human exposure to electromagnetic fields	EN 62493:2015	

#### WARNING

-Electrical device exclusively for professional use. Installation can be done by qualified personnel only.  
-In case of power supply wire damage, its replacement has to be done at the head office exclusively.

Warranty loss in case of inappropriate use and tampering.



Design & Production  
Made in Italy



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