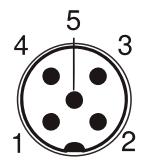


GEST99
MEGA-RING
Blue Line

99 mm Direct light illuminator

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.

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

Develop your custom solution

18 Standard Colours

Base IP65 Protection Degree

24 Vdc

Optional Polarizing Filter

CE RoHS

UK CA

Illuminator Features :

- Project achieved by internal resources and Genesi skills;
- Fast controller which allows to have the following modes: PNP, NPN, Analog Regulation, Strobe and Semi-Continuous Use;
- Microcontroller to monitor the pulse duration and the maximum temperature;
- Model with huge Lenses; 10°, 30°, 60° or 90° 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				
	White 6000K	White 4000K	UV 365nm	UV 385nm	UV 395nm	UV 405nm	Blue 450nm	Green 524nm	Red 625nm	Deep Red 660nm	IR 730nm	IR 850nm	IR 950nm	SWIR 1050nm	SWIR 1200nm	SWIR 1300nm	SWIR 1450nm	SWIR 1550nm
Continuous use power	-6K	-4K	-365	-385	-395	-405	-450	-524	-625	-660	-730	-850	-950	-1050	-1200	-1300	-1450	-1550
	7,5 W	4K	5 W				7,5 W				6 W	7,5 W		5 W				
Semi-continuous use power	15 W		9 W				15 W				12,5W	15 W		7,5 W				
Strobe use power	37,5 W		15 W				37,5 W				30W	37,5W		12,5 W				



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Rev. 02/24

GEST99 Part Number

Ex. Code : **GEST99** -YYY -WW1 -WW2 -WW3

-YYY	Led Colour	EN 62471	
-6K	Base 6000K Cold White	White	RISK1
-4K	4000K Natural White		RISK2
-365	UV 365 nm	UV - A	RISK3
-385	UV 385 nm		
-395	UV 395 nm		
-405	UV 405 nm		
-450	450 nm Royal Blue		
-524	524 nm Green	Visible	RISK1
-625	625 nm Red		
-660	660 nm Deep Red		
-730	730 nm IR	Nir	RISK2
-850	850 nm IR		
-950	950 nm IR		
-1050	1050 nm SWIR	Swir	RISK2
-1200	1200 nm SWIR		
-1300	1300 nm SWIR		
-1450	1450 nm SWIR		
-1550	1550 nm SWIR		
-YYY	Colours on demand		

-WW1	Cover variants
-T	Base Trasparent cover (90°)
-L10	10° Lens + Transparent Cover
-L30	30° Lens + Transparent Cover
-L60	60° Lens + Transparent Cover
-45T	45° Lens + Transparent Cover

-WW2	IP
	Base IP 65
IP 67	IP 67 casing 8 mm Transparent Plexiglass + gaskets + screws

-WW3	Cables
	20 cm cable + M12 5P M
-WW2	Supply connection on demand

Part Number Examples:

GEST99-6K-T

6000 K white leds, transparent cover
20 cm cable + M12 5 pole connector, IP65 protection degree.

GEST99-6K-L10

6000 K white leds, transparent cover, 10° lens
20 cm cable + M12 5 pole connector, IP65 protection degree.

GEST99-6K-L30

6000 K white leds, transparent cover, 30° lens
20 cm cable + M12 5 pole connector, IP65 protection

Optional wavelenghts and lens available on request

Design & Production
Made in Italy



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OPERATING MODE

100% CONTINUOUS USE


Connector	PINS	Function	Description
M12 Male 	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	-	

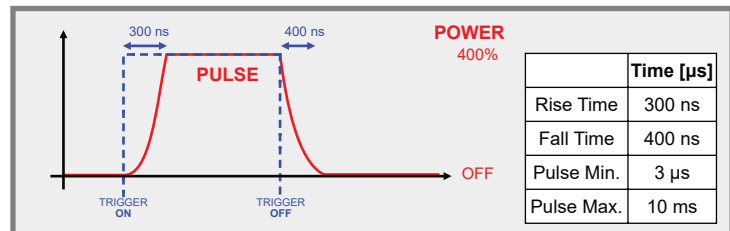
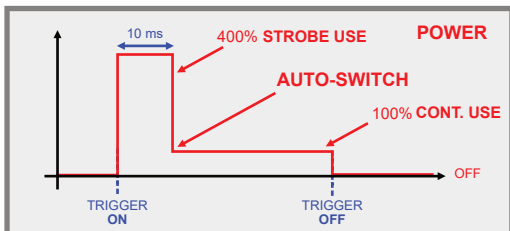
200 % SEMI-CONTINUOUS USE

Connector	PINS	Function	Description
M12 Male 	1	+24 V	Precondition: PIN5: 24 V A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V; In this mode → Ton_{max} = 60 s - Dt_{max} = 50% 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 _{max} 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	


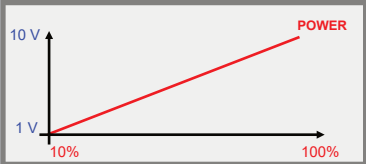
400% STROBE USE



Connector	PINS	Function	Description
M12 Male 	1	+24 V	A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V; In this mode → Ton_{max} = 10 ms - Dt_{max} = 10% 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
M12 Male 	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	



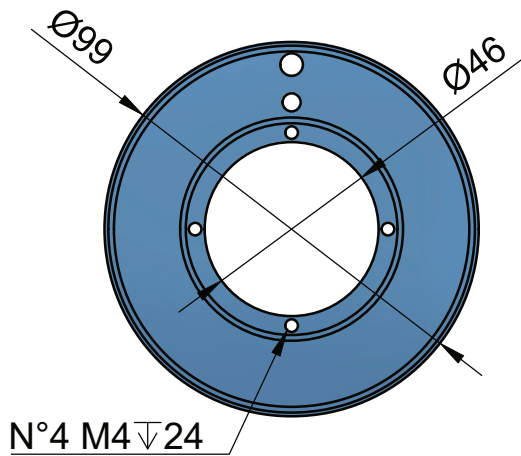
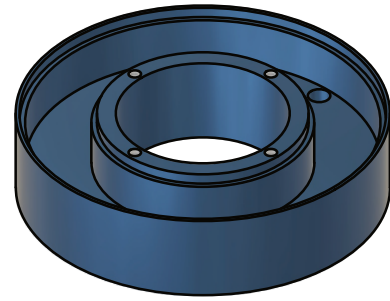
400% STROBE USE POWER can be reached only from WHITE / VISIBLE / NIR LEDS, for other wavelenghts check the power table at page 1.



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

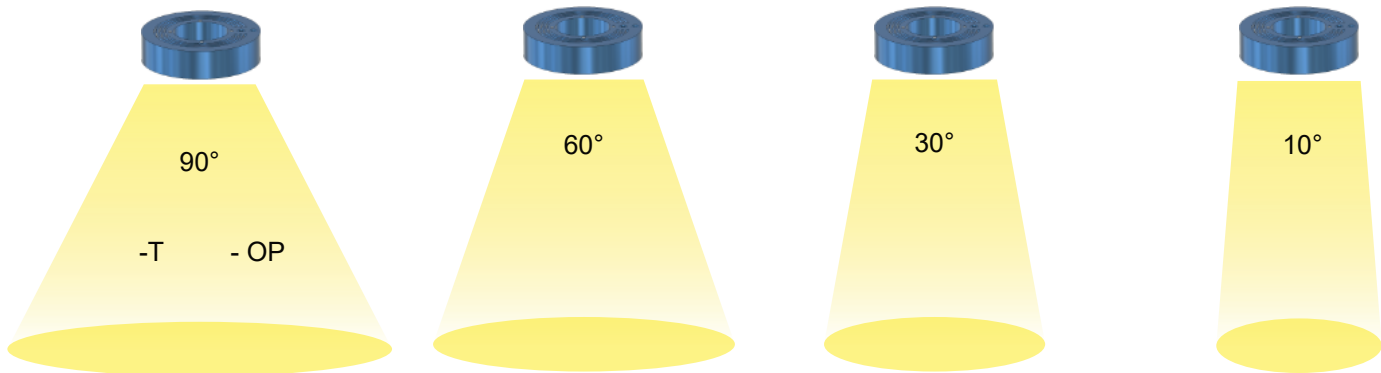
MECHANICAL DRAWING

Scale	Unit of measurement
1:2	mm
Weight	
200 g	



For 3D mechanical drawing requests - info@genesi-lux.it

LIGHT PROJECTION



-T		
Working distance	Power W/m ²	Uniform area diameter
8 cm	TBD	TBD
20 cm	TBD	TBD
50 cm	TBD	TBD

-L60		
Working distance	Power W/m ²	Uniform area diameter
15 cm	TBD	TBD
50 cm	TBD	TBD
100 cm	TBD	TBD

-L30		
Working distance	Power W/m ²	Uniform area diameter
30 cm	TBD	TBD
50 cm	TBD	TBD
100 cm	TBD	TBD

-L10		
Working distance	Power W/m ²	Uniform area diameter
40 cm	TBD	TBD
100 cm	TBD	TBD
200 cm	TBD	TBD

-OP		
Working distance	Power W/m ²	Uniform area diameter
8 cm	TBD	TBD
20 cm	TBD	TBD
50 cm	TBD	TBD

CONTINUOUS USE SEMI-CONTINUOUS USE STROBE USE

Powers related to the white colour with homogeneity ± 10%



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ACCESSORIES

CODE	DESCRIPTION
GEST99-PX2-AP	Additional Protection 2 mm Transparent Plexiglass + screws
GEST99-PX2-APF	Additional FULL Protection for Camera and illuminator 2 mm Transparent Plexiglass + screws
GEST99-PX2-UV-AP	Additional protection 2 mm transparent plexiglass UV permeable + screws
GEST99-ST2-AP	Additional protection 2 mm satin plexiglass + screws
GEST99-OP2-AP	Additional protection 2 mm opaline plexiglass + screws
GEST99-PC2-AP	Additional protection 2 mm opaline polycarbonate + screws
GEST99-P-AP	Additional protection 2 mm transparent plexiglass + Polarizing Filter + screws
GEST99-PX8-AP	Additional protection IP67 8 mm transparent plexiglass + gaskets + screws
GE-M12F-5X050-2M	M12 connector female cable 2 meters long
GE-M12F-5X050-5M	M12 connector female cable 5 meters long
GE-M12F-5X050-10M	M12 connector female cable 10 meters long
GE-ABS606E	LED Voltage Control with 6 programmable channels and 10/100 Ethernet. Second level controller for Camera and illuminator.

Filter

Additional protection

Additional FULL protection

Second level controller for Camera and illuminator

Trigger OUT for Camera

6 output channels

Illuminators

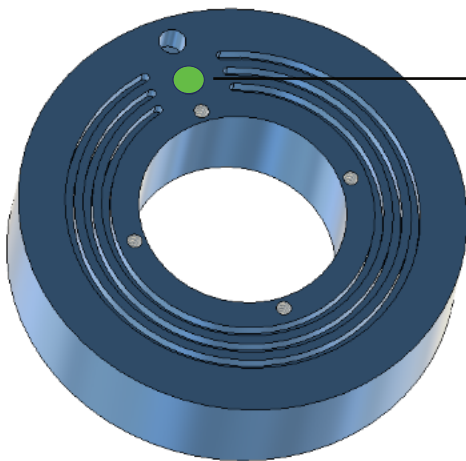
Timing Diagram:

- R: Red pulse from t_{onR} to t_{offR}
- G: Green pulse from t_{onG} to t_{offG}
- B: Blue pulse from t_{onB} to t_{offB}
- IR: Infrared pulse from t_{onIR} to t_{offIR}
- W: White pulse from t_{onW} to t_{offW}
- UV: Ultraviolet pulse from t_{onUV} to t_{offUV}
- TRIGGER OUT FOR CAMERA CCD/CMOS: High pulse from t_{on} to t_{off}
- ACQUISITION SENSITIVITY CCD/CMOS: Curve peaking at $1/2 T_s$









Tailor-Made

Connector	PINS	Function	Description
M12 Male	1		
	2		
	3		
	4		
	5		

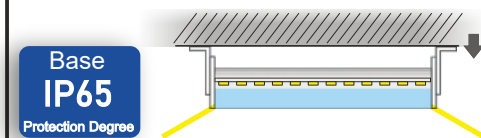
DEVELOP YOUR CUSTOM PRODUCT WITH OUR R&D TEAM



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



NEW SOLUTION

DESIGN A NEW ONE

info@genesi-lux.it



SAMPLE

TEST THE PRODUCT

info@genesi-lux.it



DOWNLOAD

TECHNICAL SPECIFICATIONS

www.genesi-elettronica.com



REQUEST

THE PRICE LIST

info@genesi-lux.it

STANDARDS

EMC immunity :	EN 61547:2009	
EMC emission :	EN 55015:2013 + A1	
Photobiologic risk :	EN 62471:2008 GLS:	
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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