



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

| 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 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: 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 530nm | Red 625nm | Deep Red 660nm | IR 730nm | IR 850nm | IR 950nm | SWIR 1050nm | SWIR 1200nm | SWIR 1300nm | SWIR 1450nm | SWIR 1550nm |
| Colour CODE               | -6K         | -4K         | -365     | -385     | -395     | -405     | -470       | -524        | -625      | -660           | -730     | -850     | -950     | -1050       | -1200       | -1300       | -1450       | -1550       |
| Continuous use power      | 15W         |             | 10W      |          |          |          | 15W        |             |           |                | 12W      | 15W      |          | 10W         |             |             |             |             |
| Semi-continuous use power | 30W         |             | 18W      |          |          |          | 30W        |             |           |                | 25W      | 30W      |          | 15W         |             |             |             |             |
| Strobe use power          | 75W         |             | 30W      |          |          |          | 75W        |             |           |                | 60W      | 75W      |          | 25W         |             |             |             |             |



**Genesi LUX®**  
 GENESI ELETTRONICA SRL - VIA BACHELET, 3/A - 41057 SPILAMBERTO (MO) - ITALY  
[info@genesi-lux.it](mailto:info@genesi-lux.it) - TEL. +39 059785566 - [www.genesi-elettronica.com](http://www.genesi-elettronica.com)  
 ©All Rights Reserved GENESI ELETTRONICA - GEST130 MEGA-RING



Rev. 02/24

# GEST130 Part Number

Ex. Code : **GEST130** -YYY -WW1 -XYZ

Led Colour

Cover Variants

Custom Version

| -YYY  | Led Colour            |         | EN 62471 |
|-------|-----------------------|---------|----------|
| -6K   | Base 6000K Cold White | White   | RISK1    |
| -4K   | 4000K Natural White   |         |          |
| -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 (no lens)  |                       |
| -L10        | Base 10° Lens, Transparent Cover |                       |
| -L30        | Base 30° Lens, Transparent Cover |                       |
| -L60        | 60° Lens, Transparent Cover      |                       |
| -45T        | 45° Lens, Transparent Cover      | only UV-A             |
| -90T        | 90° Lens, Transparent Cover      |                       |
| <b>-XYZ</b> |                                  | <b>Custom Version</b> |

## Part Number Examples:

### GEST130-6K-L30

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

### GEST130-625-OP

625 nm red leds, opaline cover, 20 cm cable + M12 5 pole connector, IP65 protection degree.

### GEST130-365-45T

365 nm UV leds, transparent cover, 45° lens, 20 cm cable + M12 5 pole connector, IP65 protection degree.

Optional wavelenghts and lens available on request

Design & Production  
Made in Italy



**Genesi LUX**

GENESI ELETTRONICA SRL - VIA BACHELET, 3/A - 41057 SPILAMBERTO (MO) - ITALY

[info@genesi-lux.it](mailto:info@genesi-lux.it) - TEL. +39 059785566 - [www.genesi-elettronica.com](http://www.genesi-elettronica.com)

©All Rights Reserved GENESI ELETTRONICA - GEST130 MEGA-RING




Organization with a certified ISO 9001:2015 Quality Management System


Rev. 02/24

# OPERATING MODE

## 100% CONTINUOUS USE


| Connector   | PINS | Function             | Description   |
|---|------|----------------------|---|
| M12 Male<br> | 1    | +24 V                | A) START NPN → PIN2: 0 to 1 V;<br>B) START PNP → PIN4: 3 to 24 V;<br><br>For the continuous use:<br>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    | -                    |   |

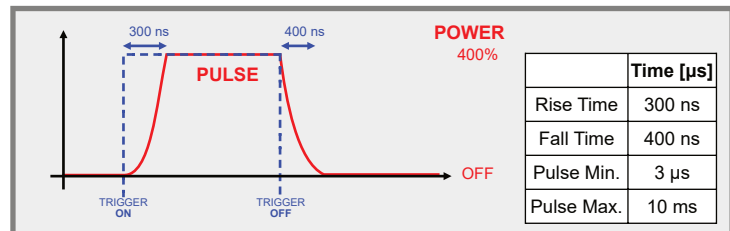
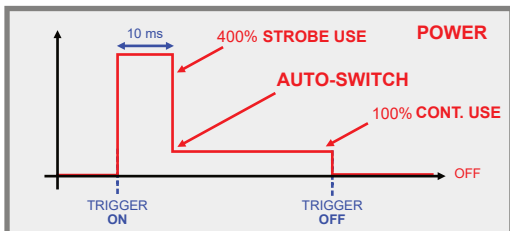
## 200 % SEMI-CONTINUOUS USE

| Connector   | PINS | Function             | Description   |
|---|------|----------------------|---|
| M12 Male<br> | 1    | +24 V                | <b>Precondition:</b> PIN5: 24 V<br><br>A) START NPN → PIN2: 0 to 1 V;<br>B) START PNP → PIN4: 3 to 24 V;<br><br><b>In this mode → Ton<sub>max</sub> = 60 s - Dt<sub>max</sub> = 50%</b><br><br>For the semi-continuous use:<br>it is possible to connect PIN4 directly to +24 V or PIN2 to GND.<br><br>To use it in continuous mode with DT <sub>max</sub> from 51% to 100%:<br>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                |   |


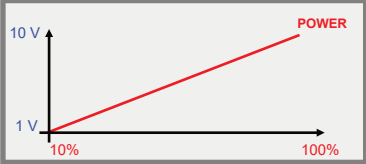
## 400% STROBE USE



| Connector   | PINS | Function             | Description   |
|---|------|----------------------|---|
| M12 Male<br> | 1    | +24 V                | A) START NPN → PIN2: 0 to 1 V;<br>B) START PNP → PIN4: 3 to 24 V;<br><br><b>In this mode → Ton<sub>max</sub> = 10 ms - Dt<sub>max</sub> = 10%</b><br><br>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<br> | 1    | +24 V      | PIN5 from 1 to 10 V can adjust the power from 10% to 100%.<br><br> |
|   | 2    | -          |   |
|   | 3    | GND        |   |
|   | 4    | -          |   |
|   | 5    | 1 V - 10 V |   |



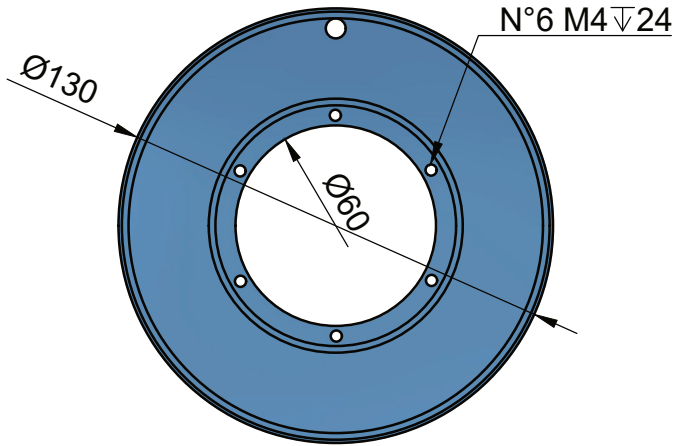
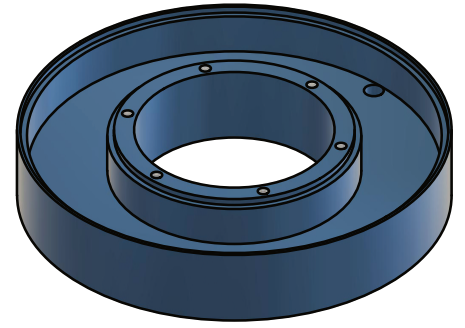
400% STROBE USE POWER can be reached only from WHITE / VISIBLE / NIR LEDS, for other wavelenghts check the power table at page 1.



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

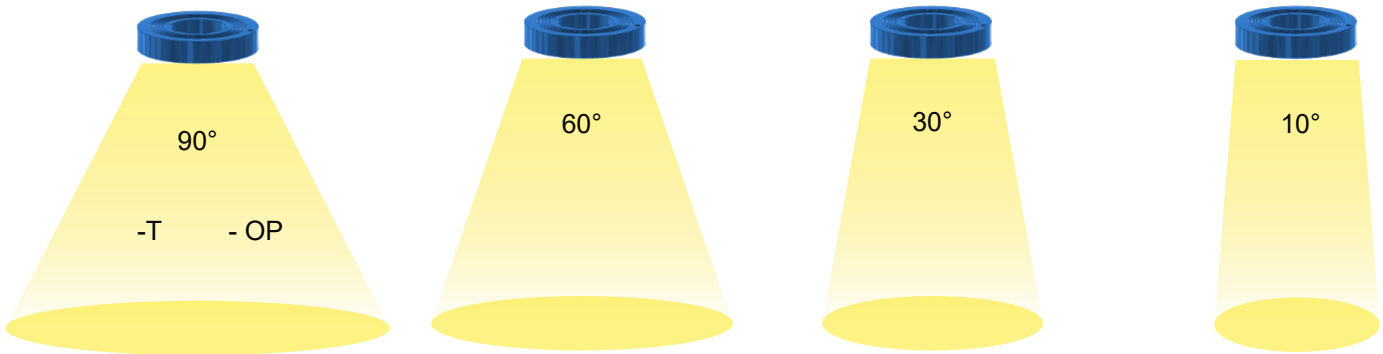
# MECHANICAL DRAWING

| Scale  | Unit of measurement |
|--------|---------------------|
| 1:3    | mm                  |
| Weight |                     |
| 440 g  |                     |



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

## LIGHT PROJECTION



| -T               |                        |                       |
|------------------|------------------------|-----------------------|
| Working distance | Power W/m <sup>2</sup> | Uniform area diameter |
| 8 cm             | 68 - 126 - 270         | 18 cm                 |
| 20 cm            | 31 - 58 - 124          | 20 cm                 |
| 50 cm            | 8 - 14 - 30            | 35 cm                 |

| -L60             |                        |                       |
|------------------|------------------------|-----------------------|
| Working distance | Power W/m <sup>2</sup> | Uniform area diameter |
| 15 cm            | 80 - 149 - 320         | 20 cm                 |
| 50 cm            | 28 - 51 - 110          | 26 cm                 |
| 100 cm           | 8 - 14 - 32            | 56 cm                 |

| -L30             |                        |                       |
|------------------|------------------------|-----------------------|
| Working distance | Power W/m <sup>2</sup> | Uniform area diameter |
| 30 cm            | 75 - 140 - 300         | 18 cm                 |
| 50 cm            | 50 - 95 - 200          | 22 cm                 |
| 100 cm           | 20 - 36 - 80           | 28 cm                 |

| -L10             |                        |                       |
|------------------|------------------------|-----------------------|
| Working distance | Power W/m <sup>2</sup> | Uniform area diameter |
| 40 cm            | 77 - 145 - 308         | 20 cm                 |
| 100 cm           | 32 - 59 - 126          | 24 cm                 |
| 200 cm           | 9 - 17 - 36            | 32 cm                 |

| -OP              |                        |                       |
|------------------|------------------------|-----------------------|
| Working distance | Power W/m <sup>2</sup> | Uniform area diameter |
| 8 cm             | 31 - 58 - 124          | 18 cm                 |
| 20 cm            | 13 - 24 - 50           | 22 cm                 |
| 50 cm            | 3 - 6 - 12             | 35 cm                 |

CONTINUOUS USE    SEMI-CONTINUOUS USE    STROBE USE

Powers related to the white colour with homogeneity ± 10%



**Genesi LUX®**

GENESI ELETTRONICA SRL - VIA BACHELET, 3/A - 41057 SPILAMBERTO (MO) - ITALY

[info@genesi-lux.it](mailto:info@genesi-lux.it) - TEL. +39 059785566 - [www.genesi-elettronica.com](http://www.genesi-elettronica.com)

©All Rights Reserved GENESI ELETTRONICA - GEST130 MEGA-RING

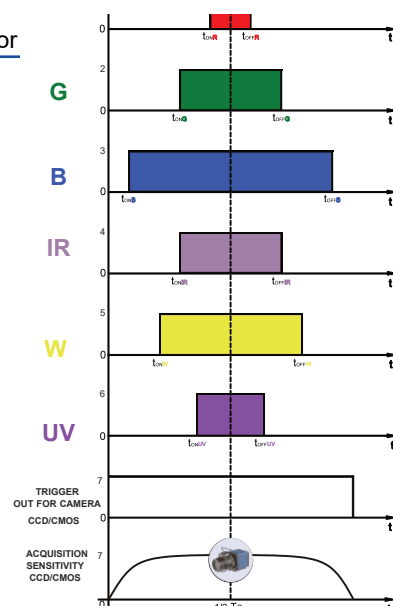
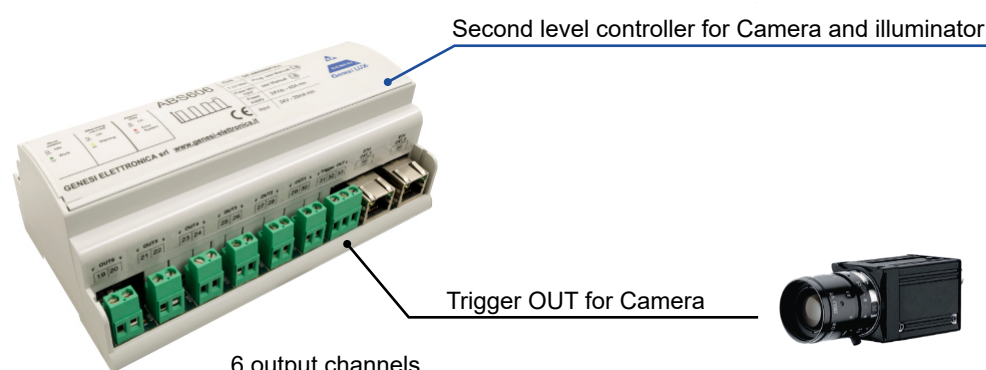
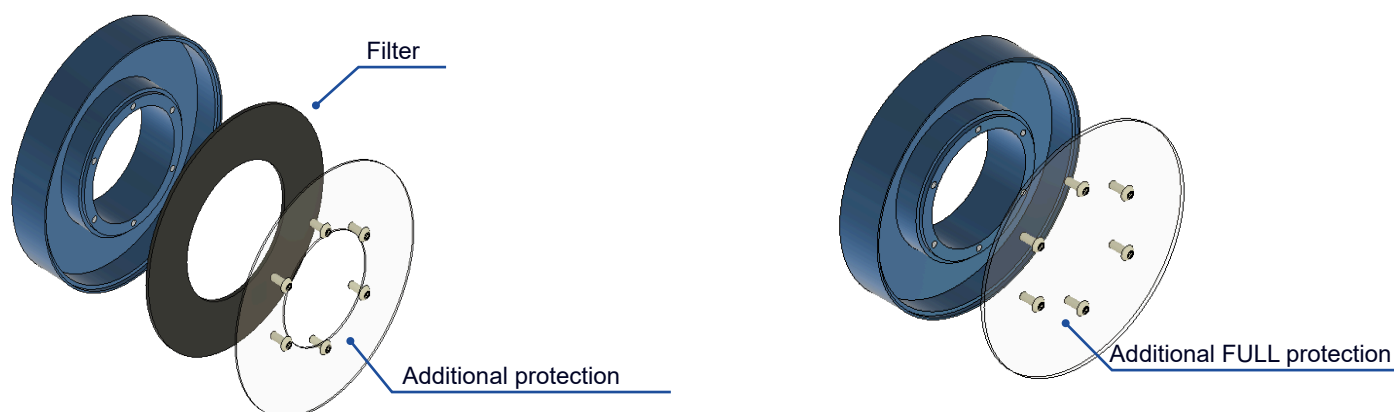


Organization with a certified ISO 9001:2015 Quality Management System

Rev. 02/24

# ACCESSORIES

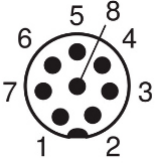
| CODE              | DESCRIPTION  |
|-------------------|--|
| GEST130-PX2-AP    | Additional Protection 2 mm Transparent Plexiglass + screws   |
| GEST130-PX2-UV-AP | Additional Protection 2 mm <b>UV</b> permeable Transparent Plexiglass + screws   |
| GEST130-ST2-AP    | Additional Protection 2 mm Satin Plexiglass + screws   |
| GEST130-OP2-AP    | Additional Protection 2 mm Opaline Plexiglass + screws   |
| GEST130-PC2-AP    | Additional Protection 2 mm Transparent Polycarbonate + screws  |
| GEST130-P-AP      | Additional Protection 2 mm Transparent Plexiglass + <b>Polarizing Filter</b> + screws  |
| GEST130-PX2-APF   | Additional FULL Protection for Camera and illuminator 2 mm Transparent Plexiglass + screws                                   |
| GEST130-PX8-AP    | <b>IP 67 casing</b> 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.<br>Second level controller for Camera and illuminator. |



# SPECIAL VERSION

PHOTOMETRIC STEREO

CODE: GEST130-YYY-WW1-PHS

| Connector   | PINS | Function                                 | Description  |
|---|------|--|--|
|  | 1    | OUT error (+24 V)                        | Illuminator with 2 sectors that can be driven independently.<br>100% continuous use, 200% semi continuous use,<br>or 400% strobe for every sector. |
|   | 2    | +24 V                                    |  |
|   | 3    | A) Start PNP: 15-24 V                    |  |
|   | 4    | B) Start PNP: 15-24 V                    |  |
|   | 5    | NC                                       |  |
|   | 6    | NC                                       |  |
|   | 7    | GND                                      |  |
|   | 8    | Set +24 V to semi continuous mode (200%) |  |







Tailor-Made

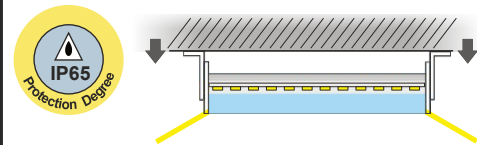
| Connector | PINS | Function | Description |
|-----------|------|----------|-------------|
| M12 Male  | 1    |          |             |
|           | 2    |          |             |
|           | 3    |          |             |
|           | 4    |          |             |
|           | 5    |          |             |

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

**LED WARNING → Meaning:**

|   |                    |                                 |
|---|--------------------|---------------------------------|
|  | Steady green LED   | Powered board                   |
|  | Flashing green LED | Powered board with driven LEDs  |
|  | Steady red LED     | Error report due to wrong pulse |
|  | Flashing red LED   | Error report due to temperature |

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



**NEW SOLUTION**

DESIGN A NEW ONE

[info@genesi-lux.it](mailto:info@genesi-lux.it)



**SAMPLE**

TEST THE PRODUCT

[info@genesi-lux.it](mailto:info@genesi-lux.it)



**DOWNLOAD**

TECHNICAL SPECIFICATIONS

[www.genesi-elettronica.com](http://www.genesi-elettronica.com)



**REQUEST**

THE PRICE LIST

[info@genesi-lux.it](mailto: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



**Genesi LUX®**

GENESI ELETTRONICA SRL - VIA BACHELET, 3/A - 41057 SPILAMBERTO (MO) - ITALY

[info@genesi-lux.it](mailto:info@genesi-lux.it) - TEL. +39 059785566 - [www.genesi-elettronica.com](http://www.genesi-elettronica.com)

©All Rights Reserved GENESI ELETTRONICA - GEST130 MEGA-RING



Organization with a certified ISO 9001:2015 Quality Management System

Rev. 02/24