

MODULAR M-HPRING



HIGH POWER RING LIGHT

with built-in driver technology

NEW RELEASE



TRANSPARENT
VERSION compatible
with **Angles Changers**



DIFFUSED
VERSION **not** compatible
with **Angles Changers**



ALUMINIUM ENCLOSURE



MOUNTING DEVICES



CURRENT CONTROL

- HIGH POWER LEDS
- INTEGRATED CURRENT CONTROL
- IP RATING **IP67**
- ANGLE CHANGERS
- DIFFUSED VERSION AVAILABLE
- CONVERGENT LIGHT ATTACHMENT

VARIOUS
COLOURS ▶

WHI 470 525 630 850



TPL VISION IS AN **ISO 9001**
CERTIFIED MANUFACTURER.

CONTACT YOUR LOCAL SALES
REPRESENTATIVE FOR **MORE DETAILS**

MODULAR M-HPRING



FEATURES OVERVIEW

**ROBUST, ANODIZED
ALUMINIUM HOUSING**

±5° LENS ANGLE

Add Angle Changers for diffusion and to change beam angle

**INTERNAL Ø
76mm**



**MAGNETIC
ATTACHMENT**

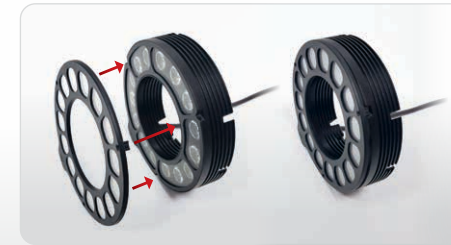
For testing **Angle Changers** and screws for fixing them in final application

IP67 RATING

with **vent** to avoid condensation.



■ ANGLE CHANGERS:



**EASILY ATTACH
THE **ANGLE
CHANGER**
ACCESSORY**

- ➔ **Narrow ±10°** (Standard & Polarised)
- ➔ **Medium ±17°** (Standard & Polarised)
- ➔ **Wide ±25°** (Standard & Polarised)

- ➔ **Polariser** alone
- ➔ **Convergent** light

■ POWER SUPPLY:

- **AUTOSTROBE**
automatic OverDrive
brightness when product
is strobed <10ms

- **DIMMING**
on continuous mode
and OverDrive mode

- **<15µs RISE TIME**

■ STANDARD M12 5 PINS

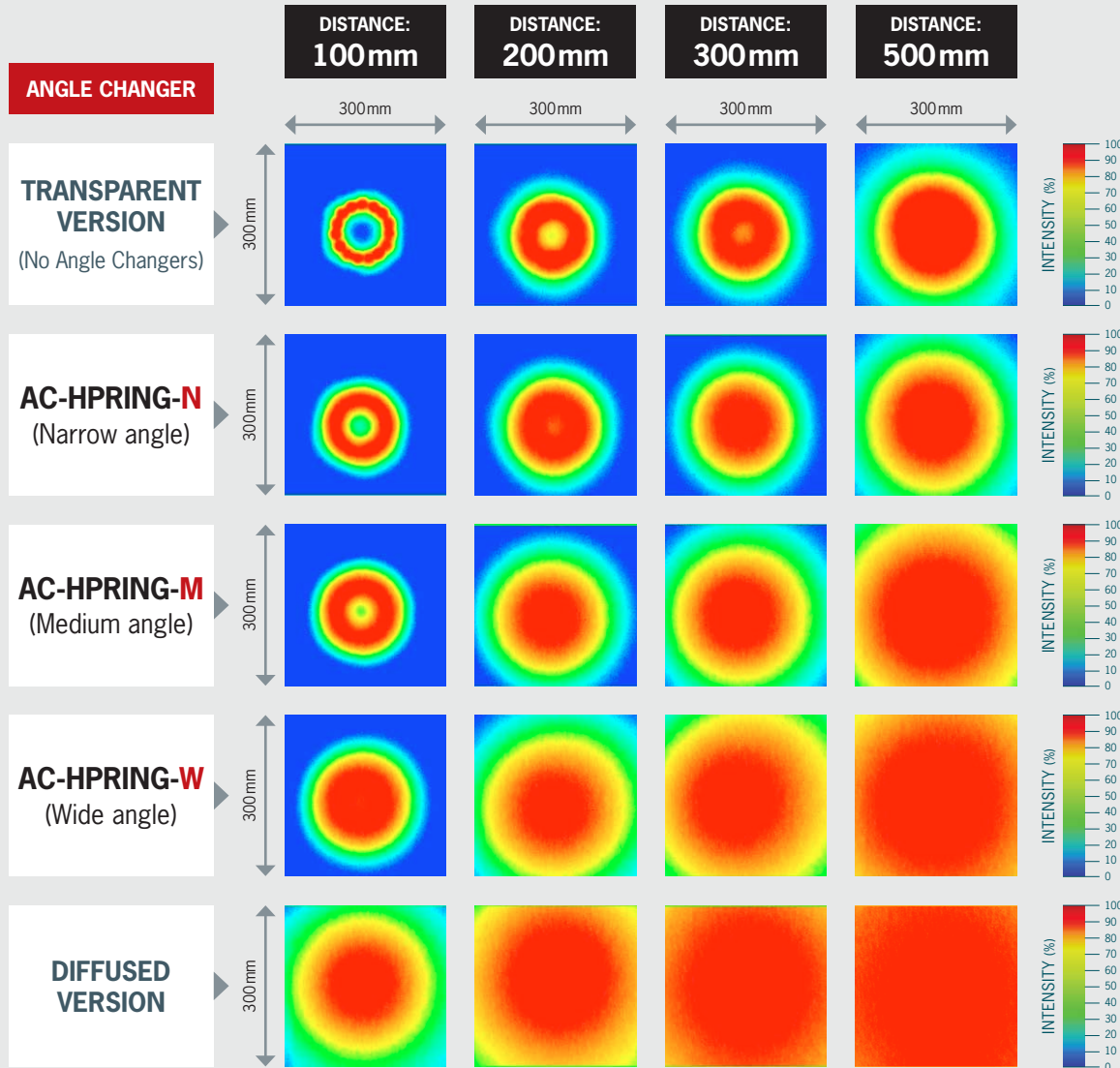
- 24VDC
- GND
- PNP
- NPN
- DIMMING 0-10V = 100-30%



MODULAR M-HPRING



FIELDS OF VIEW



Polariser options available for all angle changers except converging type.

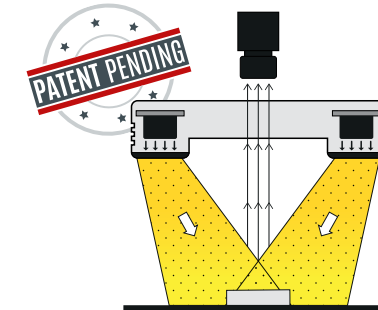
CONVERGENT LIGHT ATTACHMENT

AC-HPRING-C22

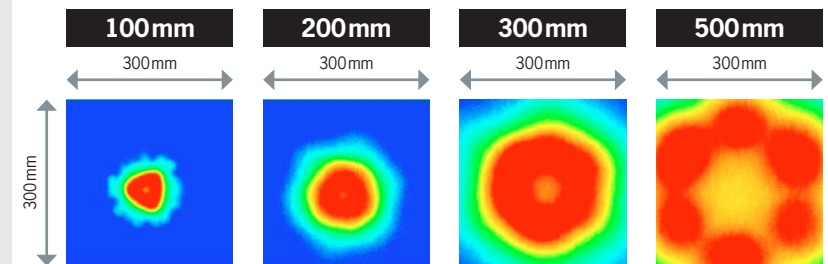
Remove the **halo effect**



Leverage **increased** light intensity at closed working distance



M-HPRING with **Convergent** Angle Changer
(Ref: AC-HPRING-C22)



Recommended for use at 100mm to 200mm.

MODULAR M-HPRING



TECHNICAL DATA

IRRADIANCE* IN OVERDRIVE MODE (data in W/m²)

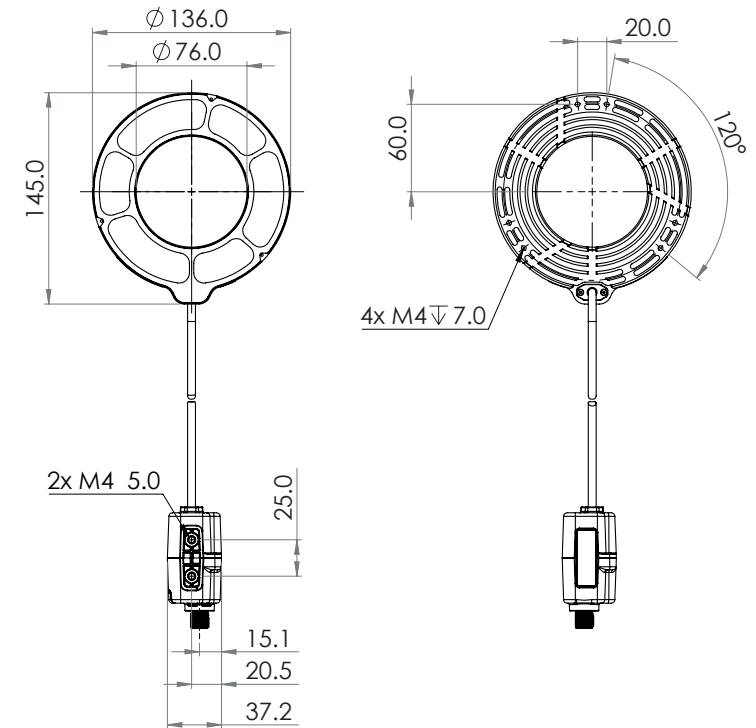
| DISTANCE | TRANSPARENT | CONVERGENT AC | OPAQUE |
|----------|-------------|---------------|--------|
| 60 mm | 29 | 628 | 404 |
| 100 mm | 60 | 2260 | 232 |
| 200 mm | 217 | 880 | 21 |
| 500 mm | 475 | 70 | 5 |
| 1000 mm | 255 | 26 | 2 |

IRRADIANCE* IN CONTINUOUS WORKING (data in W/m²)

| DISTANCE | TRANSPARENT | CONVERGENT AC | OPAQUE |
|----------|-------------|---------------|--------|
| 60 mm | 9 | 200 | 129 |
| 100 mm | 19 | 720 | 74 |
| 200 mm | 69 | 280 | 7 |
| 500 mm | 151 | 22 | 2 |
| 1000 mm | 81 | 8 | 1 |

* Measured with white LED M-HPRING. Brightness reference point is in the center of the field of view.

DRAWINGS:



| | External \varnothing (mm) | Internal \varnothing (mm) | Thickness (mm) |
|----------|-----------------------------|-----------------------------|----------------|
| M-HPRING | 136 | 76 | 28.7 |

| | |
|-------|---------------|
| Cable | length: 500mm |
|-------|---------------|

| | Length (mm) | Width (mm) | Thickness (mm) |
|--------------|-------------|------------|----------------|
| Power supply | 83.3 | 37.2 | 42.7 |

| | |
|-----------|------------|
| Connector | M12 5 pins |
|-----------|------------|

MODULAR M-HPRING



ORDER REFERENCES

| Electronics | |
|---|---|
| Power Supply | 24 VDC ±10% |
| Functioning Mode | Continuous working (CW), Strobe OverDrive |
| Rise and Fall Time | 15µs / 10µs, respectively |
| Wiring | M12 5 Pin Connector |
| Strobe Conditions | 10ms @ 20% duty cycle |
| Peak Consumption (WHI) (OverDrive peak) | 3.6A |
| Optics | |
| Colours | White, Red 630nm, Green 525nm, Blue 470nm & Infrared 850nm |
| Mechanical | |
| Dimensions | 145x136x28.7 (76 Ø internal) |
| Weight | Light: 380g / Control box: 72g |
| Materials | Aluminium (anodised), ABS, PC, Stainless Steel, Neodymium |
| Environment | |
| Operating Temperature | -10° to +40°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h) |
| Storage Temperature | -20° to +60°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h) |
| IP Protection | IP 67 |
| Information | |
| Labels | RoHS / CE / UKCA / WEEE |
| Country of Origin | Made in France |
| Tariff Number | 94054990 |



Get more information:

www.tpl-vision.com

M-HPRING:

| M-HPRING | COLOUR | DIFFUSER OPTION |
|----------|-----------------------|----------------------------|
| | WHI (white) | UN-DT (transparent) |
| | 630 (red) | NL-DO (opaque) |
| | 525 (green) | |
| | 470 (blue) | |
| | 850 (infrared) | |

EXAMPLE:

- Modular M-HPRING white LEDs transparent diffuser
➔ M-HPRING-WHI-UN-DT

ANGLE CHANGERS:

| AC-HPRING | ANGLE | OPTION: POLARISER |
|---|--------------------------|-------------------|
| Compatible with the M-HPRING-xxx-UN-DT ONLY | N (narrow) | P1 |
| | M (medium) | |
| | W (wide) | |
| | C22* (convergent) | |
| | POLARISER ONLY | |
| | POL1 | |

EXAMPLES:

- Narrow ➔ AC-HPRING-N
- Narrow with polariser ➔ AC-HPRING-N-P1

*Polarised option does not include the Convergent Angle Changer

AC COMBO:

Ref: **AC-HPRING-CO**

CONTENT:

- x1 AC-HPRING-N
- x1 AC-HPRING-M
- x1 AC-HPRING-W
- x1 AC-HPRING-C22
- x1 AC-HPRING-POL1

SWIVEL MOUNT:

Ref: **SWIVEL-MOUNT-T**



MOUNTING BRACKETS:

Ref: **TPL-MOUNT-M-HPRING-V1**

Ref: **TPL-MOUNT-LBRACKET1**

Ref: **TPL-M-HPRING-HPR-CONVERTER**

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| Optics | |
| Colours | White, Red 630nm, Green 525nm, Blue 470nm & Infrared 850nm |
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EXAMPLES:

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- Narrow with polariser ➔ AC-HPRING-N-P1

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AC COMBO:

| |
|---|
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| CONTENT: |
| <ul style="list-style-type: none">• x1 AC-HPRING-N• x1 AC-HPRING-M• x1 AC-HPRING-W• x1 AC-HPRING-C22• x1 AC-HPRING-POL1 |



MODULAR M-HPRING



ADD-ON ORDER REFERENCES

SWIVEL MOUNT



Ref: SWIVEL-MOUNT-T

ACCESSORY FOR CAMERA



Ref: TPL-MOUNT-MHPRING-V1

MOUNTING BRACKET



Ref: TPL-MOUNT-LBRACKET1

CONVERTER



Gives the M-HPRING the **same mounting positions** as the old HPRING.

Ref: TPL-M-HPRING-HPR-CONVERTER

C-MOUNT ADAPTOR



Ref: TPL-RMOUNT-CM

ADAPTOR M25.5



Ref: TPL-RMOUNT-M25.5

ADAPTOR M27



Ref: TPL-RMOUNT-M27

ADAPTOR M30.5



Ref: TPL-RMOUNT-M30.5

MOUNTING PLATE FOR ADAPTOR



Ref: TPL-RMOUNT-M-HPR-ADAP



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