

InLine Laser Modules 18 mm

Technical Information · High-power line and cross lasers, red / green / blue

Product name	InLine modules, line laser modules 18 mm	Spec	IL-xx-xxx
Description	Line and cross laser modules 18 mm	Rev	09/2026
Product line	InLine modules	Status	Public

Product description



InLine laser module 18 mm

The InLine laser modules from MediaLas are powerful and reliable line or cross laser modules for daily use in and on machines.

Thanks to the IP65 specification of the housing, these modules are also suitable for demanding operating conditions in dusty and humid environments. On request, the IP rating can be extended to IP67.

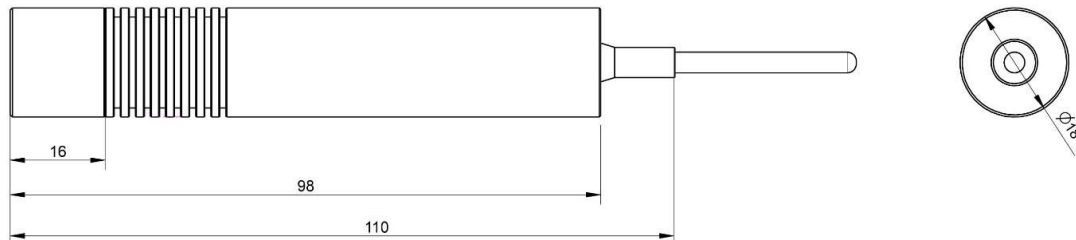
- Protected against immersion up to IP67
- Very good visibility
- Up to laser class 1
- Various line lengths and cross sizes
- Optional trigger input

Technical data

Laser power	10 mW to 150 mW
Line angles	20° · 30° · 35° · 60° · 70° · 90° · 110°
Cross angles	5° · 15° · 55° · 75° · 100°
Focus point	infinity or customer-specific

Wavelengths	520 nm green, 637 nm bright red, 450 nm blue
Operating voltage	12 V to 25 VDC
Operating mode	continuous operation or optional trigger operation
Trigger input (optional)	Low = off, High = on; up to approx. 25 V trigger voltage DC
Trigger frequency (optional)	up to max. 300 Hz
Projection type	line, cross
Laser class	1M or 2M depending on installation
MTTF at 25 °C	approx. 25,000 h, depending on type
Dimensions	18 mm diameter, approx. 98 mm length
Housing material	aluminium
Operating temperature	-15 °C to approx. +45 °C, optionally -30 °C to +45 °C
Storage temperature	-30 °C to approx. +80 °C
Humidity	up to approx. 90 %, non-condensing
Connection	flexible cable, connector
Accessories (optional)	connection cable, adjustable clamp mount

Dimensions



Connection assignment

Flexible cable without trigger input

Wire	Signal	Notes
White	Supply +	12 – 25 VDC
Brown	Supply ground	–

Flexible cable with trigger option

Wire	Signal	Notes
White	Supply +	12 – 25 VDC
Brown	Supply ground	–
Green	Trigger +	4 – 25 V
Yellow	Trigger ground	–

M8 connector (3-pin)

Pin	Signal	Notes
1	Supply +	12 – 25 VDC
4	Trigger +	4 – 25 V
3	Common ground	GND

M12 connector (4-pin)

Pin	Signal	Notes
1	Supply +	12 – 25 VDC
4	Trigger +	4 – 25 V
3	Common ground	GND

Trigger input

The optional trigger input allows the laser output to be controlled without load by means of a control signal. The signal can be taken directly from a PLC or any other control system.

Trigger input	State
permanently High (> 4 V)	Laser ON
permanently Low (> 1 V) or open	Laser OFF

Focusing and adjustment

The focus is usually set to infinity at the factory. If the working distance is shorter, the focus can also be set to a customer-specific distance. As a third option, the optical unit can be left unglued so that the user can set the focus on site. To do this, unscrew the front protective cap. We recommend fixing the optical unit with viscous screw lacquer.

Operating instructions

Important! These laser modules can generate a high laser power. This also produces power loss at the module itself, which is dissipated as heat. This heat must be dissipated via a metallic heat sink. The module must not be operated without cooling, otherwise severe defects up to and including destruction of the module may occur.



Pan/Tilt mount

Our Pan/Tilt mount, for example, is suitable for heat dissipation: it clamps the module over its full surface and acts as a heat sink at the same time.

Options

Numerous configuration options are available during the production process. Please contact us.

- Cable lengths up to 100 m
- Connectors: barrel plug, M8, M12, Superseal and others
- Protection rating up to IP67
- Customer-specific focus
- Customer-specific power

Notes on laser safety

InLine HP line laser modules are pure OEM components or assemblies and are intended for use in or attachment to machines or other constructions. Due to the very high output powers, there is a considerable hazard from laser radiation. The generally applicable standards and regulations must be observed:

- EN 60825-1
- OStrV
- TROS Laser Radiation

We are happy to assist you with classification and rating.