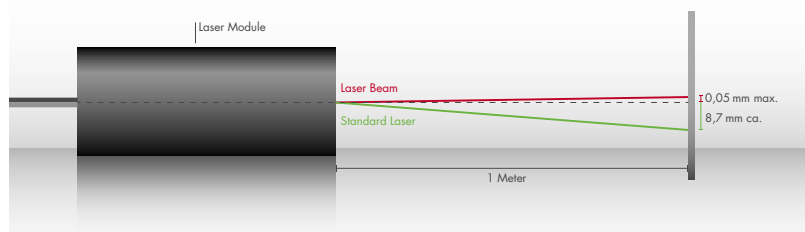


Precision Laser Modules LT-PLM Series

The precision laser modules of the LT-PLM series are precisely aligned and adjusted dot lasers for alignment tasks. The laser beam is dot-shaped (not elliptical) and deviates after a distance of 1 m by less than 0.05 mm (5/100 mm) from the mechanical axis of the housing.







Characteristics

- Axis of laser beam and mechanical axis of housing in the same line
- Circular beam profile
- Eye safe, without optical instruments
- h6 fit
- Broad supply voltage range with M12 connector (exception: GL65)
- Integrated rechargeable battery for 10 hours independent and cable-free laser power (only LT-PLM-IRB ...)

Applications

- Alignment of machines
- Straightness test of crabs and carriages
- Concentricity test of rotating parts
- Aiming or positioning tasks

Specifications

Typ	 LT-PLM-635-01 / LT-PLM-635-01-C1	 LT-PLM-Q-635-01 / LT-PLM-Q-635-01-C1	 LT-PLM-IRB-635-01 / LT-PLM-IRB-635-01-C1	 LT-PLM-635-01-GL65 / LT-PLM-635-01-C1-GL65
Wavelength (nm)	635	635	635	635
Output power (mW)	1	1	1	1
laser class	2	2	2	2
Beam profile	circular, collimated	circular, collimated	circular, collimated	circular, collimated
Beam diameter at exit (mm)	4.5 / 1	4.5 / 1	4.5 / 1	4.5 / 1
Recommended working distance (m)	0 – 10 / 0 – 3	0 – 10 / 0 – 3	0 – 10 / 0 – 3	0 – 10 / 0 – 3
Beam divergence (mrad)	0.2 / 1	0.2 / 1	0.2 / 1	0.2 / 1
Warm up time (min)	10	10	10	10
Beam pointing error (mrad)	0.05	0.05	0.05	0.05
Supply voltage DC (V)	4.5 – 30	4.5 – 30		4.5 – 30
Rechargeable battery capacity (mAh)			400	
Operating time (h)			10	
Current consumption (mA)	50	50		50
Connector type	M12 male (Pin1:+/Pin3: GND)	M12 male (Pin1:+/Pin3: GND)		
Cable length (m)				2
Housing	Aluminium, black anodised, isolated	Aluminium, black anodised, isolated	Aluminium, black anodised, isolated	Aluminium, black anodised, isolated
Dimensions (mm)	length: 100 diameter: 24	length: 100 square: 32 x 32	length: 130 diameter: 35	length: 65 diameter: 24
Fitting	h6		h6	h6
Operating temperature (°C)	0 – 50 °C	0 – 50 °C	0 – 50 °C	0 – 50 °C

Typ	LT-PLM-635-01 / LT-PLM-635-01-C1	LT-PLM-Q-635-01 / LT-PLM-Q-635-01-C1	LT-PLM-IRB-635-01 / LT-PLM-IRB-635-01-C1	LT-PLM-635-01-GL65 / LT-PLM-635-01-C1-GL65
Options	higher output power adjustable output power different wavelengths	higher output power adjustable output power different wavelengths	higher output power adjustable output power different wavelengths	higher output power adjustable output power different wavelengths
Accessories	power supply battery pack connecting cable	power supply battery pack connecting cable		power supply battery pack
Scope of delivery	precision laser module carrying case	precision laser module carrying case	precision laser module battery charger carrying case	precision laser module carrying case

M12 Power Supply and Battery Pack

FP-PS-HD-12: Universal Power Supply for 100 – 240 Volts AC

This Power Supply can be used worldwide with all laser modules having a M12 connector. It is not to be used with other equipment than specified.

FP-PS-HD-12 Power Supply

Content of delivery	power supply, 4x plug adapter (Europe, UK, USA, Japan)
Operating voltage	100 – 240 VAC / 50 – 60 Hz
Output voltage	12 VDC
Output current	10 mA – 1200 mA
Cable length	1.8 m, UL1185
Connector	M12 female (Pin 1: + / Pin 3: GND)
Operating temperature	0 °C to 40 °C



M12-5V-NiMH: Battery Pack for Mobile Applications

This battery pack power supply can be used in mobile applications with all laser modules having a M12 connector. It is not to be used with other equipment than specified. The battery pack and the Charger are designed for indoor use only.

M12-5V-NiMH Battery Pack

Content of delivery	battery pack, charger, M12 cable 4 x plug adapter (Europe, UK, USA, Japan)
Input voltage	100 – 240 VAC / 50 – 60 Hz
Output voltage	5.0 VDC
Capacity	2400 mAh
Operating temperature	-20 °C to + 60 °C
Connector	M12 (Pin 1: + / Pin 3: GND)
Cable length	2 m
Dimensions	80 mm x 75 mm x 30 mm



M12-USB-12V Connecting Cable

The M12 USB cable creates a connection between a laser module and any USB power supply. This can be a commercially available power bank, a USB power supply or the USB port of a computer. In the cable, the USB standard voltage is transformed from 5 V to 12 V, so that all laser modules that require a voltage of at least 10 V can also be operated.



Technical Data

Connection laser side	M12 socket female, 4-pin, 12 V (+/- 0.5 V), max. 600 mA, Pin 1: + Pin 3: GND
USB connection	USB-A, 5 V, max. 2.0 A
Cable length	1.5 m