

## FLEXPOINT® Laser Modules HD Series

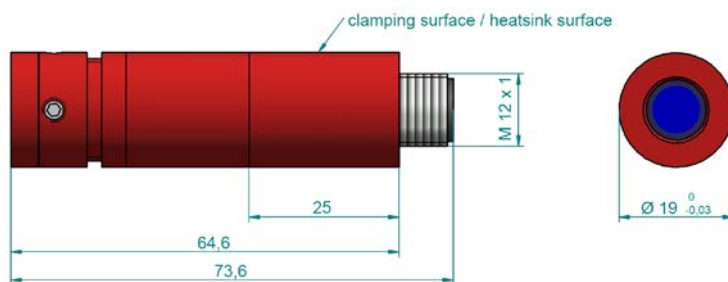
The FLEXPOINT® HD series offers various dot, line and crosshair laser modules for alignment and positioning applications. The plug and play lasers offer an user adjustable focusing mechanism and can be ordered with a wide range of accessories like power supply, battery pack and mounts.

### Features

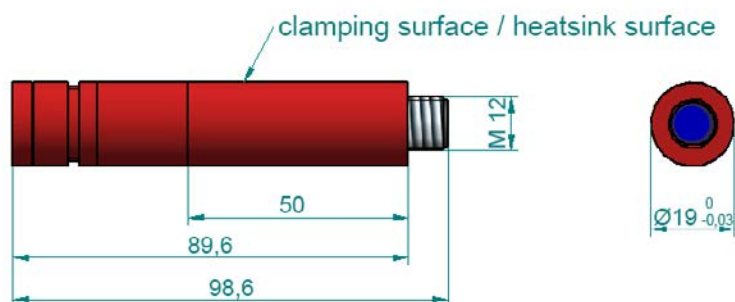
- Heavy duty housing
- Fully IP67 proved
- Dot, line and crosshair projection
- Bright green or bright red laser light
- Wide supply voltage range (4.5/10-30 VDC)
- Wide range of accessories
- Laser class 1, 1M, 2, or 2M (no laser safety eyewear necessary)



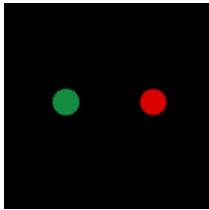

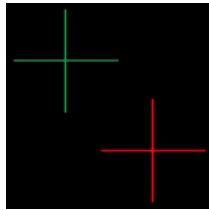
### FLEXPOINT® Laser Modules HD Series with Adjustable Focus



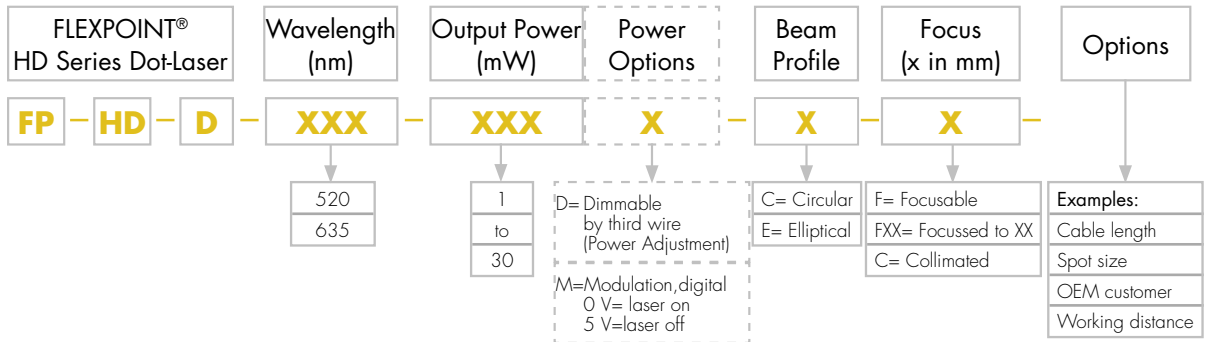
### FLEXPOINT® Laser Modules HD Series for Dot Laser



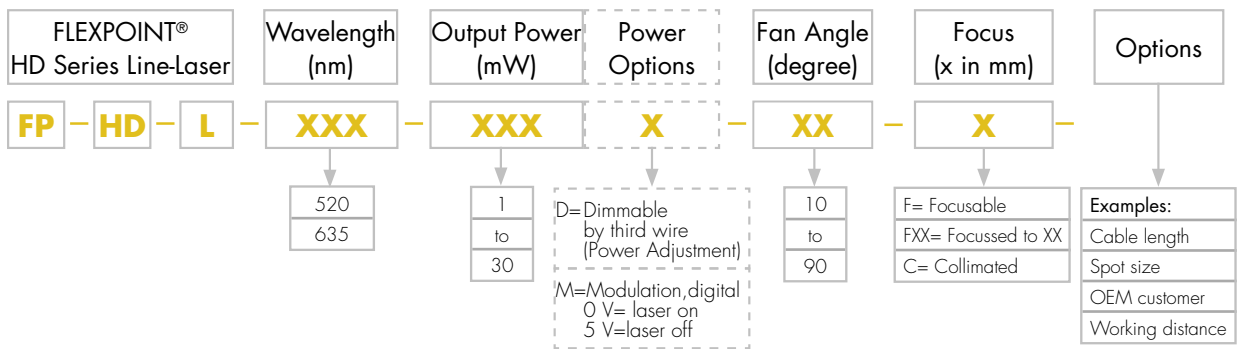
## Specifications

Laser Patterns	Dot laser	Line laser	Crosshair laser
			
Wavelength	520 nm (bright green) / 635 nm (bright red)		
Output power	<1 mW –30 mW (520 nm) / 40 mW (635 nm)		
Output power stability	< 5% (after warm up at 25 °C)		
Modulation (option)	digital, 0 – 10 kHz (active low, higher frequency on request)		
Power adjustment (option)	by control wire, 0 – 5 V (active low)		
Bore sighting	≤ 10 mrad		
Pointing stability	10 µrad/°C		
Focus	adjustable or fixed		
Operating voltage	520 nm: 10 - 30 VDC 635 nm: 4.5 - 30 VDC (reverse voltage protection)		
Current consumption	< 200 mA (depending on output power)		
Operating temperature (housing)	-20 to +50 °C		
Storage temperature	-20 to +60 °C		
Housing material	Aluminum, red anodized, potential free		
Housing dimensions	Ø 19 mm, l = 65 mm with adjustable focus, l = 90 mm for dot lasers		
Protection class	IP 67		
Connector	M12 sensor connector Pin 1: + Pin 2: Modulation (option) Pin 3: GND Pin 4: NC Option: 2 m cable instead of M12 connector		
Accessories	Mount, connecting cable, laser safety eyewear, power supply, battery pack		

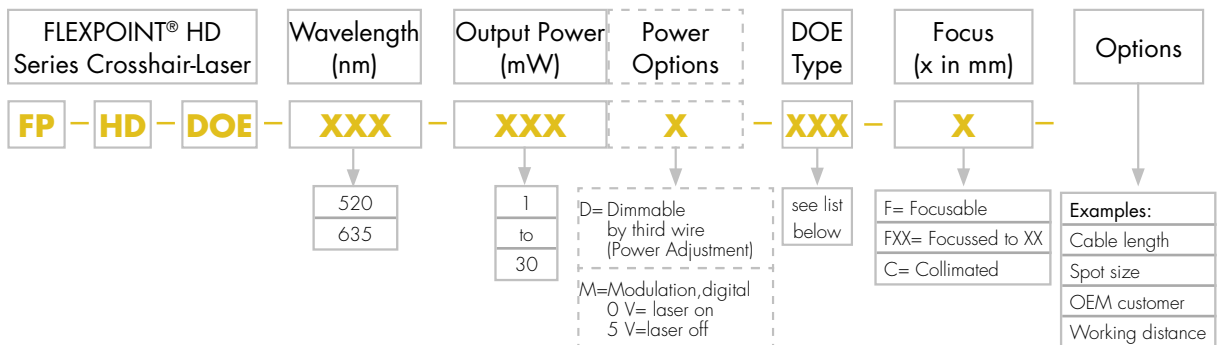
Ordering Code FLEXPOINT® HD Series Dot Lasers



Ordering Code FLEXPOINT® HD Series Line Lasers




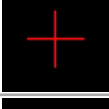
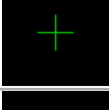
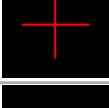

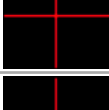
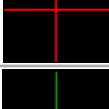



Ordering Code FLEXPOINT® HD Series Crosshair Lasers



Crosshair



DOE Item #	Description	Pattern Size @ 100 mm Distance		Pattern Angles (@ 635 nm)	Image
		a		α	
DOE-214	Cross - 2 635 nm	3.5 mm		2°	
DOE-205	Cross - 5 635 nm	9 mm		5°	
DOE-239	Cross - 5 520 nm	10.5 mm		5°	
DOE-218	Cross - 15 635 nm	26 mm		15°	
DOE-289	Cross - 15 520 nm	26.4 mm		15°	
DOE-247	Cross - 25 635 nm	44 mm		25°	
DOE-212	Cross - 25 520 nm	45.1 mm		25°	
DOE-249	Cross - 45 635 nm	83 mm		45°	
DOE-280	Cross - 60 635 nm	116 mm		60°	
DOE-342	Cross - 52 520 nm	97.6 mm		52°	

## Accessories

### FP-PS-HD-12 Heavy Duty Power Supply

This Power Supply can be used worldwide with all types of the FLEXPOINT® HD series. 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, AWG 18
Connector	M12 female (Pin 1: + / Pin 3: GND)
Operating temperature	0 °C to + 40 °C



### LT-PLM-AP-10: Battery pack for mobile applications

This battery pack power supply can be used in mobile applications with all types of the FLEXPOINT® HD series. It is not to be used with other equipment than specified. The battery pack and the Charger are designed for indoor use only.

#### LT-PLM-AP-10 battery pack

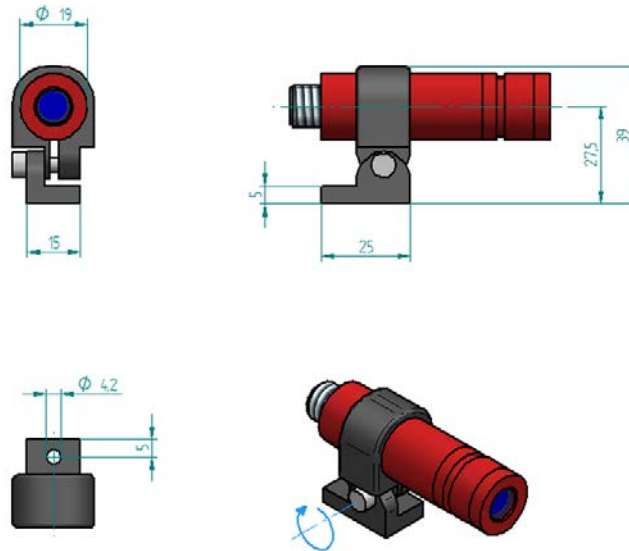
Content of delivery	battery pack, charger, M12 cable
Input voltage	100 – 240 VAC / 50 – 60 Hz
Output voltage	10 VDC
Capacity	800 mAh
Battery technology	NiMH
Operating temperature	-20 °C to + 60 °C
Connector	M12 (Pin 1: + / Pin 3: GND)
Cable length	1.5 m
Dimensions	80 mm x 75 mm x 30 mm



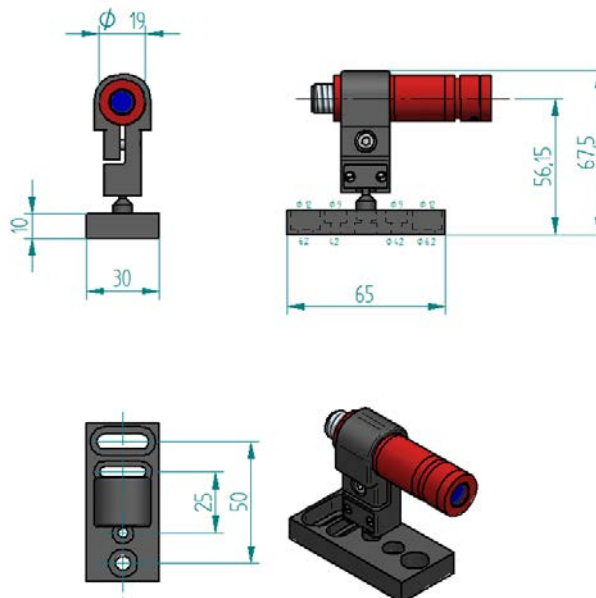
### M12 Connecting Cables

Available lengths: | 2 m/5 m/10 m

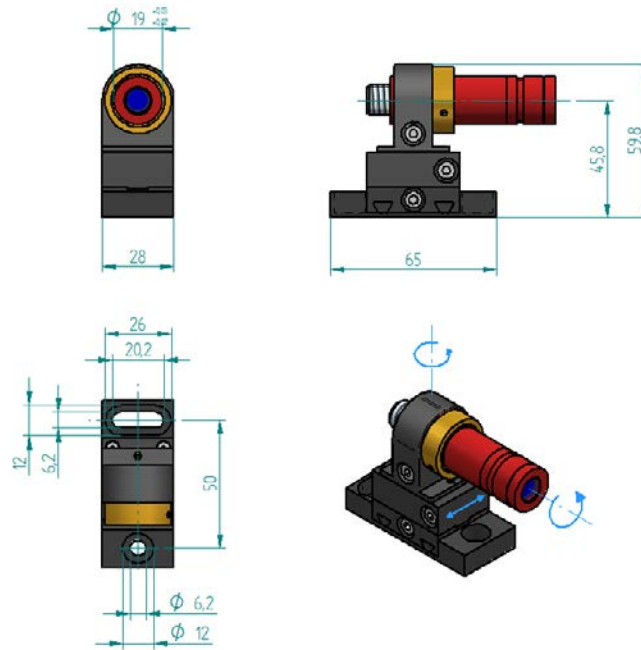
Standard Mount FP-MS-19



Mount with globe joint FP-MG-19



Precision Mount FP-MPT-19



Precision Mount FP-MPS-19

