

FLEXPOINT® Dot Laser Modules

FLEXPOINT® dot laser modules are available with either circular or elliptical output beam. Due to sophisticated electronics, a wide range of laser diodes in terms of wavelength and output power levels can be used.

In addition, the options found below in the table are also available for order and make the FLEXPOINT® laser module a universal tool.

Features

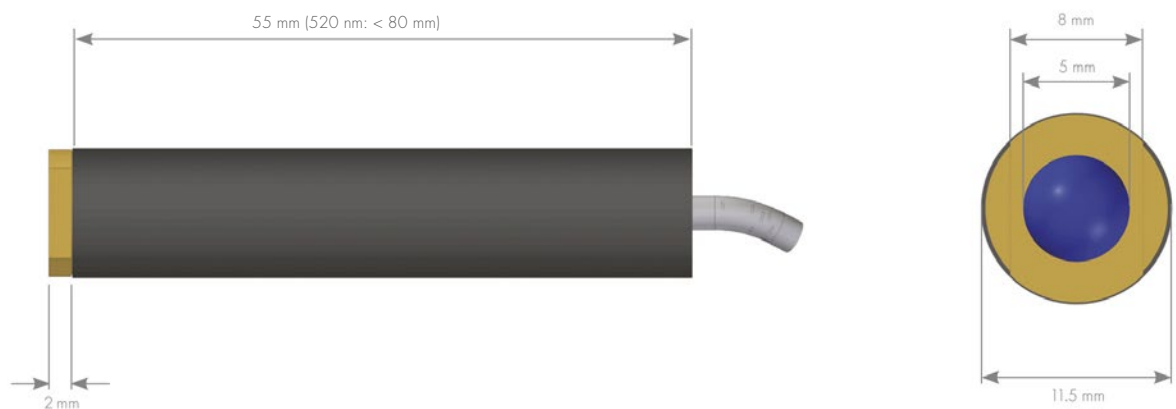
- Circular or elliptical beam
- Wavelengths from 405 nm to 905 nm (including 450 nm, 520 nm, 635-660 nm)
- Different output power levels for all wavelengths
- Adjustable or preset focus or collimated
- Choice of small or ruggedized housing

Applications

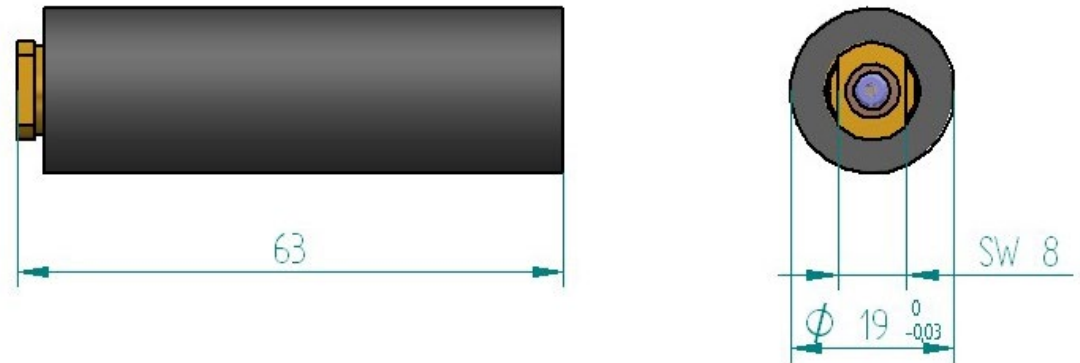
- Alignment, pointing and positioning
- Measurement tasks
- Medical, Biophotonics



Standard (small) housing

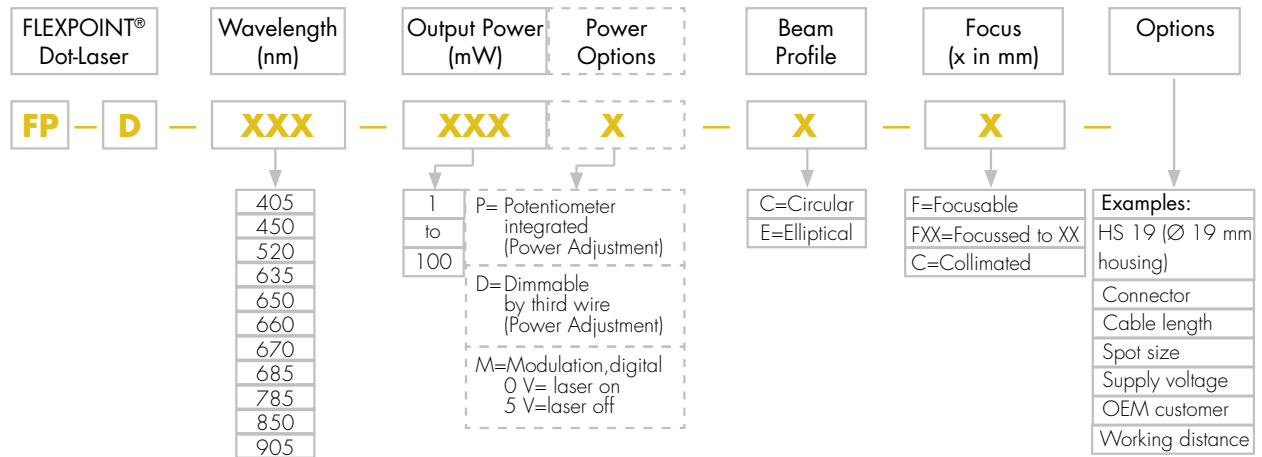


Ruggedized housing:



Wavelength	405 nm / 450 nm / 520 nm / 635-640 nm / 650-660 nm / 670 nm / 685 nm / 785 nm / 850 nm / 905 nm (other wavelengths on request)
Output Power	From <1 mW up to 100 mW
Power Stability	Better +/-5% (after warm up)
Beam Profile	Circular or elliptical
Beam Diameter at exit	Circular: 4.5 mm / Elliptical 3 mm x 1.5 mm
Beam Divergence	Circular: 0.2 mrad / Elliptical: 1 mrad
Bore Sighting	<0.5° (improved bore sighting on request)
Pointing Stability	<50 µrad/°C
Focussing options	Collimated / adjustable focus / focus preset
Focussing range	50 mm to collimation (shorter focussing range on request)
Operating voltage	4.5 - 6 VDC, reverse voltage protection (4.5 - 30 VDC as option), 10 - 30 VDC for 405/450/520 nm
Power Consumption	30 - 150 mA, depending on laser diode
Operating Temperature	0 - 50°C (depending on used laser diode, temperature range can be extended)
Storage Temperature	-10°C to +60°C
Housing size	Standard: 57 mm length, 11.5 +0/-0.03 mm diameter (520 nm: 71 mm length) Ruggedized: 63 mm length, 19.0 +0/-0.03 mm diameter
Housing Material	Black anodised aluminium, isolated (potential free)
Cable length	2.0 m
Options	Power adjustment by external potentiometer Power adjustment by control wire (0-5 V; active low) Digital modulation up to 10 kHz (0-5 V; active low), higher freq. on request Pattern generators (diffractive optical elements DOE's, see separate datasheet) Different housing style
Accessories	Mount, power supply, laser safety eyewear

Ordering Code FLEXPOINT® Dot Lasers



Standard Modules (Selection)

FP-D-635-1-C-F	635 nm	1 mW	circular beam, focusable
FP-D-635-5-C-F	635 nm	5 mW	circular beam, focusable
FP-D-635-10-C-F	635 nm	10 mW	circular beam, focusable
FP-D-635-25-C-F	635 nm	25 mW	circular beam, focusable
FP-D-635-50-E-F	635 nm	50 mW	elliptical beam, focusable
FP-D-650-1-C-F	650 nm	1 mW	circular beam, focusable
FP-D-650-1M-C-F	650 nm	1 mW	circular beam, focusable, digital modulation
FP-D-650-5-C-F	650 nm	5 mW	circular beam, focusable
FP-D-660-10-C-F	660 nm	10 mW	circular beam, focusable
FP-D-660-50-E-F	660 nm	50 mW	elliptical beam, focusable
FP-D-660-100-E-F	660 nm	100 mW	elliptical beam, focusable

Please contact Laser Components for standard modules at 670 nm, 685 nm, 785 nm, 850 nm and 905 nm.

Any other configuration (wavelength / output power / beam parameters) available on request.