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Product Division

**LDM Laser Diode Modules**

Product

**C- Series NIR**

Description

**Fibre Coupled Laser Diode Module**

Main Features

- SM fibre coupled for NIR.
- Collimator ended available.
- Circular beam after SM fibre.
- Compact design.
- High quality lens and excellent beam performance.
- Wide range of wavelengths available.

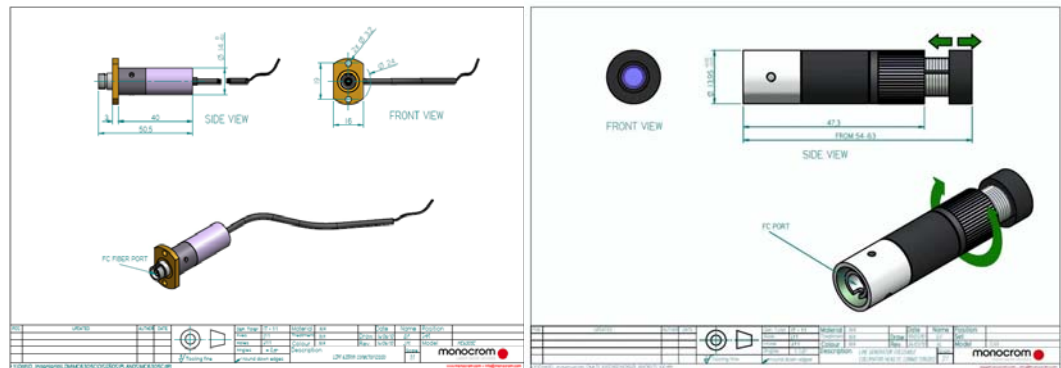
Some Applications

- Automatics & Robotics.
- Metrology.
- Guidance.
- Bio-medics.
- Lighting & Imaging.
- Fibre check.

Picture



Outline



**FIBER COUPLED LASER DIODE MODULE**

**C-SERIES**

ORDERING LDM STANDARD PART NUMBER CODE		MC-WW PP H-A LLL
<b>MC:</b> Standard basic LDM	<b>WW:</b> Wavelength	<b>PP:</b> Optical power
<b>H:</b> Housing C	<b>-Fxxx:</b> Patchcord	<b>-Txxxx:</b> Focusable optic

GENERAL SPECIFICATIONS FOR STANDARD DIODE LASER MODULES								
Model: MCxxxxC	7850	80200	8340	83150	8505	9005	9830	1010
Wavelength [nm]	785±10	808±5	830±10	830±10	850±10	905±5	980±5	1064±10
Po. [mW] (at FC connector)	40 to 47,5	160 to 190	40 to 47,5	120 to 140	4 to 4,7	4 to 4,7	24 to 28,5	8 to 9,5
Op. current [mA] typ	160	300	80	200	60	60	60	70
Op. temp. [°C]	-10 to 70		-10 to 60		-10 to 50		-10 to 50	-10 to 40
Storage temp. [°C]	-40 to 85							
Thermal stab. (optionally)	Optionally by TEC or heated.							
Polarisation ratio	>50:1							
Output power stability	<0,5%RMS							
Reverse voltage prot. circuit	Built in							
Op. voltage for cw operation	4,5 (-0,2/+1,0) Vdc Available on 24V DC with external Regulator along the cable							
Expected lifetime	>10.000 Hours							
Wires	200mm Flying leads or 200mm cable+standard connector							
Laser product class	According with the radiant flux and EN-60825 classification, duly identified by labels.							
Housing	C type : Diam.14 x 45mm length / Nickel and Brass / FC port							

Conditions @ 25°C while not specified. Specifications could change depending on LD used.

FIBER PATCH-CORDS Types (to add at module p.n.)	-004S	-04SP	-005S	-006S	-010S	-050S
Operating wavelength for single mode transmission	600-800	620-820	780-970*	970-1650	1260-1620	Multimode
Polarization maintaining	No	Yes	No	No	No	No
Coupling efficiency (% of Po), typical	30-50%	30-50%	30-50%	30-50%	60-80%	40-60%
Connector repeatability, typical	85%	85%	85%	85%	95%	90%
Mode field diameter [µm]	4.3 @ 633 nm 4.6 @ 680 nm	4.5	5 @ 850 nm *	5.8 @ 980 nm 6.2 @ 1064 nm 10.4 @ 1550 nm	9.5 @ 1550nm	50
Numerical aperture, typical	0,12	0.12	0.12	0.14	0,14	0.22
Cladding [µm]	125±2	125	125±2	125±2	125	150±2
Jacket [µm] / Protec slip [mm]	250 / 3	250 / 3	250	250 / 3	250/3	250 / 3
Min. bend diameter [mm]	25	25	25	25	25	31
Connector type, typical	FC-PC					
Length, typical	2m					
Armored Ø 5mm	Under request					

\* Special patch-cord for 830nm (5,6 µm) also available

FOCUSABLE COLLIMATORS HEADS FC CONNECTORIZED							
OPTICS HEADS	Focal Length	Max. CA Effective. Do[x]	Lens type	N.A. max	Eff Typ	Focusing Range, typ. [mm]	Housing [mm] dimensions
-TxA10	10mm @ 670nm	from 2 to 6 mm	Glass aspheric lens	0.33	60 %	60±40 to infinite	diam.14x55
-TxA15	15mm @ 670nm	6 mm	Glass aspheric lens	0,30	50 %	250±50 to infinite	diam.14x55
-TxG25	25 mm @ 635 nm	6 mm	N/A	N/A	90%	500±50 to infinite	diam.14x60
TLxx	Full angle aperture: 5,10,20,50 & 99°		Glass asph.+ cylind.	-	50 %	60±40 to infinite	diam.14x60



Ordering Information:



800 Village Walk #316  
Guilford, CT 06437  
Ph: 203-401-8093

Email orders to: [sales@xsoptix.com](mailto:sales@xsoptix.com)  
Fax orders to: 800-878-7282