

Diodes with AR Coating

updated weekly
inventory subject to prior sales



The output facet of these diodes is coated with a high-quality AR coating. A common use of AR laser diodes is within an external cavity, allowing the exploitation of almost the entire gain spectrum for single frequency laser operation when used with a suitable wavelength selective element in the cavity. Relevant laser parameters listed here are typical values achieved with external cavity diode laser system like TOPTICA's DLC DL pro.

Diodes with a checkmark in the "4-laser check" column may have power restriction when used with the 4-laser upgrade of DLC pro. Please inquire.

The linewidth value refers either to the typical instantaneous linewidth of the DL pro or typical short term linewidth if followed by "[5μs]" (*); if no value is specified, please contact TOPTICA sales for an estimation. Please inquire for more information on the frequency noise (e.g. frequency noise density).

All diodes operate in single transverse mode. They are shipped in industrial standard packages (5.6 mm or 9 mm can) unless mentioned otherwise.

(*) Link to paper: "Linewidth-measurement"

WLmin, WLmax	lower and upper wavelengths of coarse tuning range	Linewidth	$\Delta\nu$	typical linewidth (instantaneous or short term)
MHFTR	mode-hop free tuning range	4-laser check		possible restriction on power when used with the 4-laser upgrade of DLC pro
Pd	output power ex resonator with DLC DL pro or similar	Narrow	$\Delta\nu$ option	availability of narrow linewidth option

WLmin nm	WLmax nm	MHFTR GHz	Pd mW	Linewidth $\Delta\nu$ in kHz	4-Laser Check	Narrow $\Delta\nu$ option	Article Number	Stock	Remark
400	403	25	40				#LD-0400-0050-AR-1	u.r.	
410	415	25	45				#LD-0415-0050-AR-1	3	
454	460	50	20	300 [5μs]			#LD-0455-0050-AR-1	1	454nm-456nm: 15mW
647	656	10	30	30		√	#LD-0655-0030-AR-1	1	20mW outside 649-654nm
658	666	15	40	500 [5μs]			#LD-0660-0050-AR-1	1	658nm-660nm: 30mW, ellipse 4:1
665	671	35	30	100		√	#LD-0670-0030-AR-1	1	system only!
666	674	10	30	90		√	#LD-0670-0035-AR-7	1	system only; 20mW outside 668-672nm
679	694	25	45	2		√	#LD-0685-0050-AR-2	1	40mW below 681nm; system only
666	674	10	30	90		√	#LD-0670-0035-AR-8	1	System only; 20mW outside 668-672nm
679	690	30	20	300 [5μs]		√	#LD-0690-0025-AR-1	3	ellipse 4:1
674	691	35	20	30			#LD-0690-0025-AR-2	3	15mW outside 680 - 686nm
696	710	20	35				#LD-0705-0040-AR-1	> 3	outside 701nm-706nm: 30mW; System only
689	707	30	35	2		√	#LD-0705-0040-AR-2	> 3	>25mW outside 694-705nm; system only

TOPTICA Photonics AG, Lochhamer Schlag 19, D-82166 Gräfelfing, Phone: +49 (0)89 858 37-0, Fax: +49 (0)89 858 37-2000

email: info@toptica.com, internet: <https://www.toptica.com/> or <https://www.laser-diodes.com/>

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721	737	15	30	0.7			√	#LD-0730-0030-AR-1	> 3	15mW outside 725-731nm
732	743	15	13	15			√	#LD-0740-0015-AR-1	> 3	>10mW 732-738 & 740-743nm; PER <1:10; please inquire
715	740	30	40	3			√	#LD-0730-0040-AR-4	> 3	above 738nm: 30mW, 10GHz MHFTR; system only
777	790	10	220	15	√		√	#LD-0780-0220-AR-1	1	200mW outside 779-788nm; PER < 1:10
755	790	20	80	0.5			√	#LD-0780-0080-AR-4	1	45mW below 770nm; 25mW below 760nm
746	768	15	100	70 [5μs]				#LD-0760-0080-AR-2	1	90 mW <748 nm; PER < 1:4; below 746nm reduced ASE suppression
800	865	30	100	0.5			√	#LD-0840-0100-AR-1	> 3	80mW below 825nm; 60mW outside 815-855nm
785	810	30	100	100 [5μs]	√		√	#LD-0790-0100-AR-1	> 3	70 mW outside 795-805 nm
840	875	30	90	5			√	#LD-0860-0080-AR-1	> 3	80mW below 855nm, 65mW below 845nm
840	885	10	90	20			√	#LD-0860-0080-AR-3	> 3	80mW outside 850nm-880nm; 70mW below 845nm
894	920	20	40	100 [5μs]				#LD-0910-0050-AR-1	3	outside 905nm-915nm: 35mW
885	940	25	120	80 [5μs]	√		√	#LD-0920-0200-AR-1	2	100mW outside 894nm-935nm; ellipse 4:1
885	940	25	120	80			√	#LD-0920-0200-AR-2	2	100mW outside 894nm-935nm; ellipse 4:1
930	990	18	100	50 [5μs]			√	#LD-0935-0100-AR-2	> 3	90mW outside 970nm-983nm; 60mW outside 950-990nm
990	1085	25	200	50 [5μs]	√		√	#LD-1060-0200-AR-2	u.r.	Please inquire; 90mW 990-1020nm
1080	1125	5	300	0.6	√			#LD-1110-0300-AR-1	u.r.	250mW outside 1100-1120nm
990	1085	25	200	50 [5μs]			√	#LD-1060-0200-AR-3	u.r.	Please inquire; 90mW 990-1020nm
1120	1145	20	130	50 [5μs]	√		√	#LD-1120-0100-AR-2	> 3	above 1140nm 100mW; ellip.5:1
1115	1163	10	100		√			#LD-1150-0100-AR-2	2	40mW <1150nm; ellipse 5:1
1150	1230	10	140	50 [5μs]	√		√	#LD-1200-0100-AR-1	> 3	80mW below 1210nm, ellipse 5:1, inquire
1170	1270	30	80	4	√			#LD-1220-0100-AR-1	> 3	60mW outside 1225-1260nm, 40mW below 1190nm
1215	1275	15	100	20 [5μs]	√			#LD-1250-0100-AR-1	> 3	60mW outside 1235nm - 1265nm; ellipse 5:1
1180	1280	10	140	0.4	√			#LD-1260-0140-AR-1	> 3	80 mW outside 1250 – 1265 nm
1220	1320	20	100	20 [5μs]	√			#LD-1300-0100-AR-1	2	>30mW below 1285nm. Ellipse 5:1. Please inquire.
1270	1350	40	50	20 [5μs]	√		√	#LD-1320-0050-AR-3	2	Please inquire

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1340	1450	30	80	100 [5 μ s]	√	√		#LD-1380-0050-AR-1	> 3	70mW < 1390nm, 50mW < 1360nm; please inquire
1490	1580	20	50		√	√		#LD-1550-0050-AR-2	> 3	30mW outside 1520-1565nm, ellipse 1:1, inquire
1510	1630	20	50			√		#LD-1600-0050-AR-1	> 3	20mW outside of 1540-1620, inquire
1630	1770	14	50		√	√		#LD-1700-0030-AR-3	> 3	30mW <1650, inquire