



Diodes with AR Coating

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 such as threshold current, slope efficiency and maximum output power depend strongly on the quality of the external cavity. We list here the typical values achieved in our tunable external cavity diode laser DL pro:

WLmin, WLmax shortest and longest wavelength **Pd** output power at the central part of the spectrum, **Linewidth $\Delta\nu$** laser linewidth in DL pro
MHFTR mode-hop free tuning range can be lower at edges of the wavelength rang **Narrow $\Delta\nu$ option** availability of DL pro option

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

WLmin nm	WLmax nm	MHFTR GHz	Pd mW	Linewidth $\Delta\nu$ in kHz	Narrow $\Delta\nu$ option	Article Number	Stock	Remark
400	403	25	40	100		#LD-0400-0050-AR-1	1	
410	415	25	45	100		#LD-0415-0050-AR-1	u.r.	
414	420	25	45	100		#LD-0417-0050-AR-1	u.r.	
454	460	50	20	100		#LD-0455-0050-AR-1	u.r.	454nm-456nm: 15mW
645	654	20	15			#LD-0650-0015-AR-1	> 3	please inquire about special specifications
648	656	30	40			#LD-0650-0040-AR-2	u.r.	30mW outside 650-654nm; ellipse 4:1
654	659	15	25			#LD-0658-0030-AR-2	> 3	
658	666	15	40			#LD-0660-0050-AR-1	2	658nm-660nm: 30mW, ellipse 4:1
672	675	15	20	150		#LD-0675-0035-AR-1	3	ellipse 4:1
679	690	30	20	300	✓	#LD-0690-0025-AR-1	u.r.	ellipse 4:1
689	707	20	35	100	✓	#LD-0695-0040-AR-1	> 3	25mW outside 694nm-705nm
715	734	18	40	100	✓	#LD-0725-0040-AR-1	> 3	35mW outside 720nm-732nm; up to 740nm possible!
744	770	15	100	70		#LD-0760-0080-AR-2	> 3	90 mW <748 nm; PER can be < 1:4
755	787	25	50			#LD-0780-0050-AR-1	u.r.	20 mW <765 nm; 30 mW <775 nm
765	805	35	140	50	✓	#LD-0790-0120-AR-2	> 3	>100mW 778-790nm; >80mW 770-778nm; >50mW 765-770nm
785	810	30	100	100	✓	#LD-0790-0100-AR-1	u.r.	70mW outside 795-805nm

u.r. : upon request



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805	850	10	80	200		#LD-0840-0050-AR-1	u.r.	>50mW 805-810nm; >60mW 810-815nm; >70 mW 815-825nm
839	877	30	90	100		#LD-0860-0080-AR-1	> 3	80mW outside 850nm-875nm; 75mW below 842nm
847	885	30	90	100		#LD-0860-0080-AR-2	2	80mW outside 858nm-883nm; 75mW below 850nm
885	940	25	120	80	✓	#LD-0920-0200-AR-1	1	100mW outside 894nm-935nm
894	920	20	40	100		#LD-0910-0050-AR-1	1	outside 905nm-915nm: 35mW
910	985	50	100	50	✓	#LD-0935-0100-AR-1	1	70mW outside 930nm-975nm
980	1075	15	50			#LD-1050-0050-AR-2	1	20mW <995nm; 30mW <1010nm
1000	1085	25	200	50	✓	#LD-1060-0200-AR-2	> 3	inquire
1070	1145	20	130	50	✓	#LD-1120-0100-AR-2	u.r.	outside 1120-1140nm 100mW; <1090nm 80mW; ellip.5:1
1115	1163	10	100			#LD-1150-0100-AR-2	u.r.	40mW <1150nm
1150	1230	10	140	50	✓	#LD-1200-0100-AR-1	3	80mW below 1210nm, ellipse 5:1, inquire
1215	1265	15	100	20		#LD-1250-0100-AR-1	u.r.	60mW outside 1235nm - 1265nm
1220	1320	20	100	20		#LD-1300-0100-AR-1	> 3	>30mW below 1285nm. Ellipse 5:1. Please inquire.
1270	1350	40	50	20	✓	#LD-1320-0050-AR-3	> 3	
1340	1450	30	80	100	✓	#LD-1380-0050-AR-1	> 3	70mW < 1390nm, 50mW < 1360nm; please inquire
1430	1520	15	60	100	✓	#LD-1450-0060-AR-2	> 3	30 mW < 1440 nm, >1510 nm
1490	1580	20	50	60	✓	#LD-1550-0050-AR-2	> 3	30mW outside 1520-1565nm, ellipse 1:1, inquire
1510	1630	20	50	100	✓	#LD-1600-0050-AR-1	> 3	20mW outside of 1540-1620, inquire
1630	1770	20	50	100	✓	#LD-1700-0030-AR-2	u.r.	30mW <1650, inquire
1630	1770	20	50	100	✓	#LD-1700-0030-AR-3	> 3	30mW <1650, inquire

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