



Laser HD Series



B.L.S. Industrial Laser Systems

The "Robust"

The HD-Series diode lasers are designed for industrial applications in harsh environment. They project spots, lines or cross-lines which are clearly visible, even in daylight.

A rugged stainless steel housing protects the laser diode, precision optics and electronic circuitry. The laser diode is galvanically separated from the power supply, which makes the laser extremely resistant to voltage peaks or current variations.

The wide range input capacity enables the HD-lasers to be used with all typical low voltage power nets.

The optics may be focused without tools.

Spot size or line width can be adjusted.
The line position doesn't change during focusing.

Technical Variations

Standard Models Line Lasers

Model	Output Power	Length of line up to	Laser Class
LAP1HDL	1 mW	1 m	2
LAP3HDL	3 mW	2 m	2 (3A)*
LAP5HDL	5 mW	4 m	3A
LAP10HDL	10 mW	7 m	3A
LAP15HDL	15 mW	11 m	3A
LAP30HDL	30 mW	20 m	3B

Technical Terms
for LAP-lasers:

"LAP"
"Power"
"Series"
"Optics, if selectable"
"Details"

Standard Models Spot Lasers

Model	Output Power	Laser Class
LAP1HDP	1 mW	2
LAP3HDP	3 mW	3B
LAP5HDP	5 mW	3B
LAP10HDP	10 mW	3B
LAP15HDP	15 mW	3B
LAP30HDP	30 mW	3B

A **LAP**-laser
with **5 mW**
of **HD**-Series
with **L**ine optics
without further details

is named

LAP5HDL

Standard Models Cross-line Lasers

Model	Output Power	Length of Lines up to	Laser Class
LAP_HDX	see above	on demand	2 / 3A / 3B

() * possible with special optics

Technical Data

Laser Type	Diode
Wavelength	635 nm, red
Divergence	0,5 mrad
Beam Diameter at Exit	5 x 2 mm
Range of Focussing	from 30 mm to ∞
Input Voltage	12 - 30 V DC 15 - 20 V AC <i>5 V DC optional, not galvanically seperated</i>
Power Consumption	max. 1,5 W
Protection	IP 67
Operating Temperature	-10 °C to +40 °C
Estimated Lifetime	> 20.000 h at 25 °C

Accessories

Plug-in power supply STN-HD-5 / STN-HD-5us

For optional 5 V-version, 230 V AC / 5 V DC or 110 V AC / 5 V DC

Plug-in power supply STN-HD-24 / STN-HD-24us

230 V AC / 24 V DC or 110V AC / 24 V DC

Cabinet-mount power supply

for up to 5 HD-Lasers, 95 - 264 VAC input voltage,
24 V DC or 5 V DC, fuse 2,5 A fast,
overheating protection with periodical restart
IEC 950 / EN 60950 / VDE 0805

Bracket B2-HD

Fix standard bracket, rotation around laser axis

Bracket B3-HD

like B2, additional adjustment rotation up/down (360°),
rotation left/right (+/- 5°), translation left/right (+/- 15 mm)

Special brackets and positioning systems

Special Optics

Diaphragms

Special Housings