



Socketdriver RMC Laser Diode Driver with BF LD Socket



The Socketdriver RMC is a laser diode driver, that can be controlled through a digital electronic interface or the front panel. A customer owned laser diode or SLD (BF-package) can easely plugged to an internal socket and the fiber pigtail connected with the front panel fiber adapter (standard is SC). The LSD^P-version is used with LD having pump laser pinout, the LSD^S-version is used with signal lasers.

The Socketdriver RMC can be easely controlled by commands through the serial interface. Command structure, such as (details in the manual):

set ch1 pow xxx get ch1 vol L

The driver is DC powered (12 V), an additional (external) switching power supply for wall-plug operation is an available option (depends on country of use). Also other fiber adapters can be reviewed as an option.





control interface:

size: weight:

air flow for cooling:

lop: 165 x 85 x 215 mm (WxHxD)

environmental conditions: 12 V DC, 2 A

bottom front side in, back side out features (interface, commands) max 2 A (LD), max. 3 A (TEC)

USB

non-condensing, Top +5°C ... 50°C

operation of LD in ACC, APC mode, PVI-test

TEC setpoint -20° ... 60°C (set LD TEC)

Max Current Setpoint

set: LD power by IP-out or current by Iop (ACC, APC)

current increments and max lop

max. TEC current max ITEC

temperature by thermistor value

read: LD operational current (Iop)

TEC current (I_{TEC})

LD monitor current (IMPD)

heatsink temperature by thermistor value (T_{MF})

LD temperature by thermistor value (TLD)

compliance voltage (V_{LD}) and TEC voltage (V_{TEC})

2.9 V

 0.5° K (LD TEC), 0.5 mA (I_{op}), ~ 1 mW (I_{P-out} or I_{MPD})

0.5 mA min. current increment (PVI-test) 0.1°K (@constant T_{MF} after 1 hour warm-up)

temperature stability (TEC setpoint):

current stability (Iop):

setpoint resolution:

modulation:

power stability (IMPD):

maximum compliance voltage:

compliance voltage (V_{LD}):

fiber termination:

fixture accepts:

20 Hz minimum, rise/fall time max. 1 µs 0.5% (@constant T_{MF} after 1 hour warm-up)

0.5% (@constant T_{MF} after 1 hour warm-up)

10 mV (@constant T_{MF} after 1 hour warm-up)

SC

butterfly-package laserdiodes (specify pinout)

