

Digital laser diode controller



Koheron CTL200-0 is a digital low-noise laser diode driver combined with a TEC controller. It drives up to 600 mA laser current with a compliance voltage up to 3.2 V. It is the screw terminal version of the [CTL200 digital butterfly laser diode controller](#).

Specifications

	B-200	B-400	B-600
Current driver			
Laser current	5 - 225 mA	10 - 450 mA	15 - 675 mA
Laser current resolution	5 μ A	10 μ A	15 μ A
Compliance voltage at max. current	up to 3.3 V	up to 3.3 V	up to 3.2 V
RMS noise (10 Hz - 1 MHz)	220 nA _{rms}	430 nA _{rms}	650 nA _{rms}
Current noise density (1 kHz)	230 pA/ \sqrt Hz	450 pA/ \sqrt Hz	670 pA/ \sqrt Hz
1/f corner noise	100 Hz	100 Hz	100 Hz
Temperature coefficient	35 ppm/ $^{\circ}$ C	35 ppm/ $^{\circ}$ C	35 ppm/ $^{\circ}$ C
Modulation gains	250 μ A/V, 2.5 mA/V, 25 mA/V	500 μ A/V, 5 mA/V, 50 mA/V	750 μ A/V, 7.5 mA/V, 75 mA/V
3 dB modulation bandwidth	10 MHz	10 MHz	10 MHz
TEC controller			
Maximum current	1.15 A	1.15 A	1.15 A
Compliance voltage	\pm 3 V	\pm 3 V	\pm 3 V
Temperature stability	0.002 $^{\circ}$ C/ $^{\circ}$ C	0.002 $^{\circ}$ C/ $^{\circ}$ C	0.002 $^{\circ}$ C/ $^{\circ}$ C
Laser power monitor			
Photodiode current	0 - 2.5 mA	0 - 2.5 mA	0 - 2.5 mA
Other			
Outside Dimensions	58 mm x 100 mm x 15 mm	58 mm x 100 mm x 15 mm	58 mm x 100 mm x 15 mm
Weight	38 g	38 g	38 g
Supply voltage	7.5 V to 12.5 V	7.5 V to 12.5 V	7.5 V to 12.5 V
Operating temperature	0 $^{\circ}$ C - 50 $^{\circ}$ C	0 $^{\circ}$ C - 50 $^{\circ}$ C	0 $^{\circ}$ C - 50 $^{\circ}$ C
Compatible lasers	Floating diodes	Floating diodes	Floating diodes

Ordering codes

- CTL200-0-B-200: Laser current 200 mA
- CTL200-0-B-400: Laser current 400 mA
- CTL200-0-B-600: Laser current 600 mA