



ds11-t192-series Tabletop High Power Laser Current Source + TEC Controller



The product series ds11-t192 of table top drivers has all features of the ds-series. It is powered by an input voltage of 110~230VAC with power factor correction. The power ranges up to 1500W. The laser diode current ranges up to 120A and voltage up to 48V.

As in all DS devices an RS232 interface for controlling and monitoring is integrated. CW or pulse modes are available. An pulse generator is integrated. External digital or analog modulation is supported.

The typical rise time is 25 μ s. Rise times below 5 μ s are achievable. Optionally, up to 2 TEC circuits are possible.

PRECISION CURRENT SOURCE:

- Current: 0 – I_{max} (CW and pulsed)
- Accuracy: \pm 0.5%
- Voltage: 0 – V_{max}, Volts Compliance Voltage Range
- Setpoint Resolution: 12Bit (I_{max}/4096)
- Noise and Ripple: < 1% full scale (rms)
- trise-tfall typical ~ 25 μ s (opt. < 5 μ s)

INTEGRATED PROTECTION FEATURES:

- Slow-start circuitry
- Voltage and current limits
- Transient protection and shut-down
- Open circuit shut-down
- Over temperature shut-down
- Interlock shut-down

PRECISION TEMPERATURE CONTROLLER:

- TEC Control Power up to 300W
4A-14V, 8A-14V, 12A-18V, 12A-24V, 7A-48V or others
- Temperature Control Range: -25°C to 150°C
- Accuracy typ. \pm 0.01K
- Fast Feedback Loop P.I.D. temperature controller
- Temperature Limits
- Temp. Sensor Inputs for NTCs (standard 10 k Ω), PT100, PT1000

PULSING (QCW) MODE OF OPERATION:

- Rise / Fall Time: < 20 μ s, 10%-90% (< 10 μ s on request)
- Integrated pulse generator
- Bias Current option
- Integrated low impedance cables for clean pulse response
- Accepts external analog and digital modulation
- Single pulses and pulse bursts, internal or external triggered

INTERFACE:

- Front Panel display with touch-keys
- RS-232 remote I/O with optional USB
- free PC User Interface based on LabVIEW™
- free LabVIEW™ VI

DEVICE FEATURES:

- Photo Diode Power Monitoring included
- Pilot Laser Supply
- Adjustable External Fan Support
- Supply Voltage: 98~230VAC

OPTIONAL:

- up to 2 TEC circuits
- additional noise reduction for I < 30A
- up to 400% pulse current boost

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Selection of some Standard Device Configurations:

Type	Device Name	Laser Current Max[A]	Laser Voltage Max[V]	1st TEC Current Max[A]	1st TEC Voltage Max[V]
296	ds11-la70v05-pa07v48-t19291-v0-296	70	5	7	48
533	ls11-la32v48-t19274-v0-533	32	48		
321	ls11-la35v40-t19222-v0-321	35	40		
532	ls11-la64v24-t19275-v0-532	64	24		
607	ls11-la70v05-t19220-v0-607	70	5		
478	ls11-la90v12-t19270-v1-478	90	12		
477	ls11-la110v12-t19270-v1-477	110	12		
344	ls11-la125v12-t19270-v1-344	125	12		

If your type is not among the listed types please request!

