

**ds11-t85-series**

**Tabletop Laser Current Source & TEC Controller**



The product series ds11-t85 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 from 100W to 460W. The laser diode current ranges up to 25A and voltage up to 18V.

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 25µs. Rise times below 5µs are achievable. Optionally, up to 2 TEC circuits are possible.

**PRECISION CURRENT SOURCE:**

- Current: 0 - I<sub>max</sub> (CW and pulsed)
- Accuracy: ± 0.5%
- Voltage: 0 - V<sub>max</sub>, Volts Compliance Voltage Range
- Setpoint Resolution: 12Bit (I<sub>max</sub>/4096)
- Noise and Ripple: < 1% full scale (rms), typ <0.1%
- trise-tfall typical ~ 25µs (opt. < 5µs)

**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. ±0.01K
- Fast Feedback Loop P.I.D. temperature controller
- Temperature Limits
- Temp. Sensor Inputs for NTCs (standard 10 kΩ), PT100, PT1000 and others

**PULSING (QCW) MODE OF OPERATION:**

- Rise / Fall Time: < 25µs, 10%-90% (< 5µs 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: 110~230VAC

**OPTIONAL:**

- up to 2 TEC circuits
- additional noise reduction
- up to 400% pulse current boost
- interfaces USB, RS485 or RS422

**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]
119	ds11-la1.5v14-pa02v14-t8535-v4-119	1.5	14	2	14
460	ds11-la04v08-pa04v14-t8535-v1-38-460	4	8	4	14
575	ds11-la04v14-pa04v14-t8535-v0-575	4	14	4	14
169	ds11-la08v14-pa08v14-t8535-v1-169	8	14	8	14
26	ds11-la12v08-pa08v14-t8535-v3-26	12	8	8	14
2	ds11-la14v06-pa08v14-t8535-v0-2	14	6	8	14

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

