

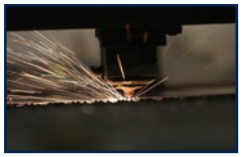
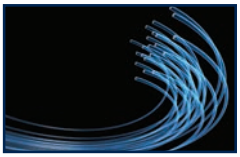

Table Top consisting of Laser, Power Supply and Cooling Block for Lumics 14pin BTF, TO220 and LuOcean Mini 4 Laser Modules

Lumics provides high precision and cost effective power supplies and drivers for 14pin butterfly, TO220 and LuOcean™ Mini 4 series laser. Standard interfaces are the RS232 port, and analog current control. You can set arbitrary limits for current, voltage and laser diode heat sink temperature. The device can modulate the laser internally by on-board oscillator or may be configured for external modulation. Multiple circuits watch over the laser security to avoid any harm to the laser.
Every device has passed several safety tests for proving static discharge and transient protection.


Features & Functions:
- RS 232 interface
- External analog and digital modulation
- C.W and pulsed operation
- Bias current option for modulation
- Integrated driver for pilot laser
- Voltage, current and temperature limits
- Fan supply
- TEC driver included

Benefits:
- Compact design
- Transient protection
- Safe diode laser operation
- Customised interface options
- Cost-effective
- High reliability
- LabVIEW driver

Applications:
- Analytics and sensing
- Material processing
- Medical laser treatment
- Marking

General Parameters

Type / Parameter		Unit
Power supply (1)	100-230V AC, 50-60Hz	
Operating temperature	15-30	°C
Storage temperature	0-40	°C
Humidity / non condensing atmosphere	0-80%	RH%
Pilot laser supply	5V, 150mA	
Fan supply	12-24V, 0.3A	
Weight (power supply)	ca. 2	kg

We manufacture diode lasers.

Versions and Characteristics

Designed for		single mode 14pin butterfly	multi-mode TO220	LuOcean Mini (2)	
				7W to 30W	
		LUxxxxMyyy	LUxxxxTyyy	LUxxxxDyyy	
					
Max. output current	I_{max}	4	12	18	A
Max. output voltage	U_{max}	6	14	8	V
Housing size (LxWxH) (3)		200x105x85	245x119x95	245x119x95	mm
Typical rise/fall time					
I_{op}=0%...50% of I_{max}		30	50	50	µs
I_{op}=50%...100% of I_{max}		10	15	20	µs
Current accuracy		+/-2%*I_{max}	+/-2%*I_{max}	+/-2%*I_{max}	
Current repeatability		+/-0.5%*I_{max}	+/-0.5%*I_{max}	+/-0.5%*I_{max}	
Current noise		I_{max}/1000	I_{max}/1000	I_{max}/1000	
External modulation input (BNC)		0-4	0-4	0-4	V
Peltier Module					
Max. TEC current		4	8	8	A
Max. TEC voltage		14	16	16	V
Temperature control range		-20 to +60	-20 to +60	-20 to +60	°C
Temperature control accuracy		+/-0.2	+/-0.2	+/-0.2	°C
Temperature control resolution		0.01	0.01	0.01	°C
Maximum Heat Pump at difference cooler-hot = 0K		4.3	20	50	W
Optional Cooling Block					
Cooling block type		LU_CB_M_0	LU_CB_T_0	LU_CB_D_0	
Cooling block dimensions		105x54x52	119x62x89	189x125x89	mm
Cooling block weight		ca. 1.2	ca. 1.2	ca. 2.2	kg

Comments:

(1) 24V on request.

(2) LU_DR_AD18A08V_A_AC for LuOcean Mini with temperature sensor NTC (10k), other temp. sensors on request.

(3) Optionally in 19inch rack mount or integrated in powered air-cooled diode laser system.