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Technical data sheet
ML-28SM-488-50

Laser for laboratory use with input to external modulation and smooth adjustment of power and modulation depth

Technical data

Module is equipped with pulse laser diode controller allowing for constant operation or for generation of blue laser light pulses with frequency and filling specified by external generator.

The controller also provides stabilization of average optical output power, soft-start system, protection against damage due to reverse polarization of supply voltage and ESD safety system.

completion:
1. Laser.
2. BNC jumper (used for continuous operation forcing).
3. Universal mains power supply Uwy=9VDC/1,2A, DC joint -jack 5.5x2.1mm.

Safety class	3B acc. To PN-EN 60825-1:2014
Wave length	488 nm ± 10 nm
Maximum optic power	40 mW ± 1.0 mW
Power adjustment	<50 mW
Modulation depth adjustment	20% – 100%
Power supply	9 VDC/100mA
Factory focusing length	1 m
Laser output beam diameter	4.3 mm
Housing and dimensions	Aluminium housing, black , φ 25 mm x 105 mm
Universal mains power supply	Uwy=9VDC/1,2A, DC joint -jack 5.5x2.1mm
Control: laser is activated by contacting control input with power supply minus or supplying low TTL level to control input; laser is deactivated by supplying high TTL level or leaving unconnected input.	
Laser activation delay with reference to control signal for 100% modulation	~2,5µs
Laser deactivation delay with reference to control signal for 100% modulation	~1µs
Acceptable modulation frequency and minimum time interval to next laser activation (filling) results solely from laser activation and deactivation times and from modulation depth.	
Galvanic separation of laser circuits against its housing.	

Rev: 01.201r.

Note:

1. Protect power supply against temporary surges exceeding 15V. In case of power supply from simple mains power supplies, one should first turn on mains power supply and then laser module power supply.

Examples of modulation oscillograms for 1kHz; 100kHz and 500kHz: