

QUANTA[®]-OEM laser driver

STANDARD QUANTUM CASCADE LASER DRIVER

The QUANTA[®]-OEM together with SPECILAS[®]Q or QF series lasers forms a compact and easy to handle pocket size mid infrared laser source. It is suitable for industrial and lab purposes and provides electrical and thermal control.

APPLICATIONS

- Tunable Diode Laser Absorption Spectroscopy
- Monochromatic IR source

PROPERTIES

- Automatic mode
- Square pulse forms
- Very low pulse aberration and instabilities
- Proven for real time spectroscopic measurements
- Easy laser exchange, within 15 minutes
- Minimal weight



CHARACTERISTICS

Parameter	Symbol	Ratings	Units	Comments
Laser current	I	1.5 ... 9	A	
Pulse width	t _p	21 ... 310	ns	
Rise / fall time	t _{rf}	< 8	ns	
Repetition frequency	f _{rep}	≤ 200	kHz	
Laser temperature	ϑ	-10 ... +40	°C	
Duty cycle	DC	typ. 0.1	%	$DC \max = \frac{24mA}{I}$
Recommended input voltage for pulsed current	U _I	0 ... 5	VDC	
Recommended input voltage for pulsed width	U _{ip}	0 ... 5	VDC	
Weight	m	230	g	
Dimensions	l x w x h	85 x 53 x 36	mm	
Housing material		Al		

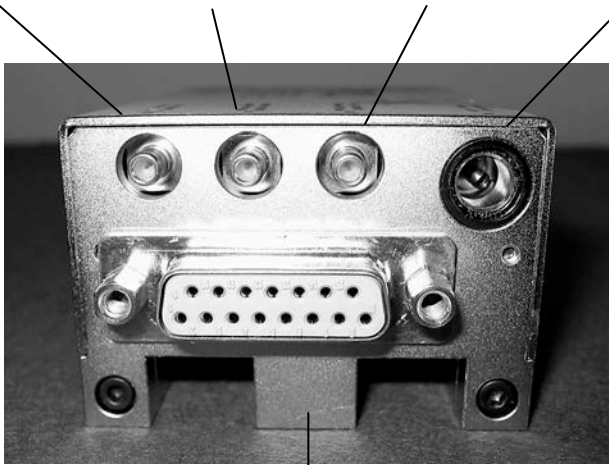


TRIGGER IN/OUT
TTL .. CMOS-level
@ 50 Ω SMB

CURRENT MONITOR
100 mV/A
@ 50 Ω SMB

VOLTAGE MONITOR
100 mV/A
@ 50 Ω SMB

SUPPLY
VOLTAGE
+ 12 VDC



15 pin – SUB-D connector
for remote operation



TEMPERATURE MANAGEMENT:

- Extractor fan operation is automatically controlled
- Additional heatsinks are recommended

INTEGRATED TRIMPOT:

- Repetition frequency
- Pulse width
- Current adjust
- Current limit
- Temperature adjust

STATUS-LED:

- TEC disabled (yellow)
- Temp OK (green)
- Triggered (red)
- Overload (red)

ADDITIONAL FEATURES AVAILABLE UPON REQUEST:

- Extended laser current up to 16 A
- A special adapter is available to combine the QUANTA[®]-OEM with the THz-QCL lasers mounted in dewars.

INCLUDED IN DELIVERY:

- QUANTA[®]-OEM module
- Power adapter 100 –240 VAC to 12 VDC
- Accessory: Blank 15-pin Sub-D plug as contact for Sub-D jack

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