Q-MACS Basic TO3



technical specification

The Q-MACS basic TO3 is an advanced QC laser driver. It consists of a newly developed laser head, which is compatible to the Q-MACS basic supply. This enables the extension of existing Q-MACS setups by the possibility to drive TO3 packaged QCL devices.

This head is a robust and versatile laser driver for currently available pulsed QC laser based on the TO3 package. Within the laser head a high performance temperature controller as well as a thermoelectric cooler and the pulse driver are installed.

Because of its sturdy design, the system can be utilized for spectroscopic applications at industrial facilities. The Q-MACS basic is a QC laser head containing all necessary electronics, a power supply and a connecting cable. Furthermore special software (Q-MACSoft 2.0) to control the basic features of the Q-MAC System is included.

dimensions	58 mm x 58 mm x127 mm
weight	850 g
connector	compatible with Q-MACS Basic
\$\\ \begin{picture}(60 \\ \text{\tint{\text{\tinit}\\ \text{\texi}\text{\text{\texi}\text{\text{\text{\text{\texi{\texi{\texi}\text{\texi{\texi{\texi{\texi{\text{\texi{\texi{\text{\texi}\texi{\texi{\texi{\texi{	1 TEC + 2 thermistor 3 thermistor 4 negative contact of the laser 5 positive contact of the laser 6 not connected 7 not connected 8 TEC -
QCL voltage	017V [1]
QCL current	up to 9A
frequency	up to 1MHz
pulse width	8 ns 256 ns
max. TEC voltage	3V [2]
max. TEC current QCL temperature range	2A [2]
	min10 °C [3] max. +40 °C [3]
	weight connector QCL voltage QCL current frequency pulse width max. TEC voltage max. TEC current

 $^{^{[1]}}$ depends on the Supply, QCL voltage on the supply can be changed to max. 27V

 $^{^{[2]}\,\,}$ different TEC voltage (max. 15V) and current (max. 5A) on request

 $^{^{[3]}}$ different ranges are possible: -10 °C...+17 °C or -3 °C...+40 °C