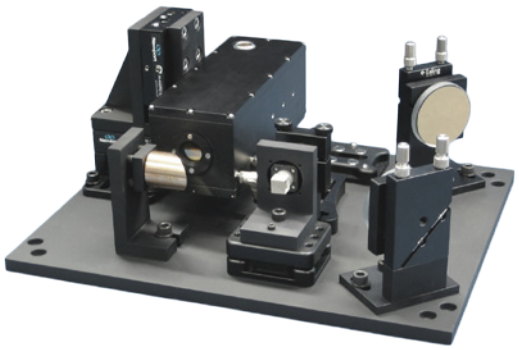
Q-MACS Research

technical specification

The Q-MACS Basic plus comes additionally with collimating and alignment optics: base plate, XYZ stage, alignment laser, removable beam splitter, off axis parabolic mirror (OAP) and 2 gold coated mirrors on adjustable mirror mounts.



general	
dimensions	64 mm x 64 mm x 170 mm
weight	1050 g
pulse width	8 ns*... 256 ns** * depends on the used QCL and the QCL-voltage; ** longer pulses on request
pulse frequency	up to 1 MHz
cw current	to 900 mA
QCL temperature range	-35 °C to +40 °C
QCL	tested and installed (on request)

cable	
length and weight	2 m (other lengths on request), 500 g
connector	straight or rectangular

supply	
dimensions	42 TE/3HE x 235 mm = 236 mm x 139 mm x 256 mm
weight	5.4 kg
power	230 V / 1 A / 50 Hz; 115 V / 2 A / 60 Hz (switchable)
working range	+5 °C to +40 °C

signals on BNC	
input	▪ trigger (external / internal) (TTL); gate (TTL) ▪ set temperature: -4 V (= -40 °C) to +4 V (= +40 °C) ▪ set QCL-voltage: 0 ... 10 V programmable voltage
output	actual temperature: -400 mV (-40 °C) to +400 mV (+40 °C) actual QCL-voltage

collimation and allignment board	
dimension	320 mm x 260 mm x 110 mm
weight	7.6 kg (without head)
output	▪ collimated infrared laser beam, diameter ca. 25 mm ▪ co-alligned visible red trace laser beam, diameter ca. 3 mm

RS 232 interface	
parameter control	using Q-MACSoft 2.0