

# Q-MACS Basic SC Supply

## technical specification

The Q-MACS Basic Single Channel (SC) supply is part of a new generation QCL driver tailored for OEM application. It combines highest reliability in pulse generation with a compact and robust design and provides outstanding flexibility for driving QCL in pulsed or continuous wave mode respectively. It is a robust and versatile laser driver system for various infrared absorption spectroscopic applications and can be utilized for fundamental and industrial research purposes. The system is capable to deal with laser heads of different characteristics containing all electronics necessary to support diverse packages. It comes with special control software to configure the device via its USB interface.



### general

description            single channel QCL driver  
                              utilizes compact laser heads  
                              very flexible pulse regimes  
                              various operational modes (pulsed, continuous wave)  
                              USB-interface

dimensions            160 mm x 240 mm x 140 mm\*  
                              \*dimensions might change slightly  
                              depending on the model

weight                    2 kg

working range        +5 °C to +40 °C

power                    230 V / 1 A / 50 Hz; 115 V / 2 A / 60 Hz (switchable)

pulse frequency     up to 5 MHz

pulse width            6 ns ... 510 ns\*  
                              \*resulting optical pulse width  
                              depends on the used QCL,  
                              the electronic pulse width  
                              is determined by the FPGA load

cw or bias current    up to 800 mA per channel\*  
                              \*not available, when using Q-MACS LH8 laser head

temperature range   -25 °C to +40 °C

### head

supported devices    Q-MACS LH8  
                              Q-MACS LH3 II

### USB interface

parameter control    using related driver and control Software