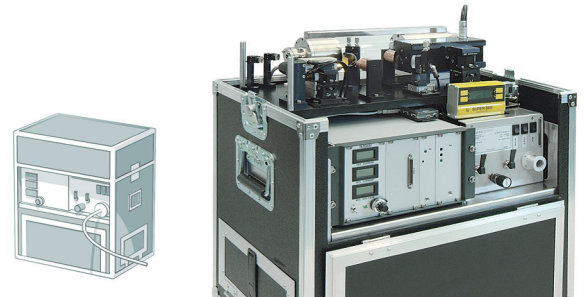


Q-MACS Trace compact



technical specification

The Q-MACS Trace compact is a new developed compact, easy portable system for high sensitive trace gas measurements using a 36 m optical long path cell. It bases on the Q-MACS Basic and uses infrared absorption spectroscopy to measure absolute molecular concentrations.

head	description	single path infrared spectrometer with IR-light source and 36 m long path cell
	sensitivity	up to ppb range [1]
	time resolution	up to millisecond
	size	520 mm x 600 mm x 370 mm
	weight	40 kg
	system version	Q-MACS Trace 3.6 - 36 m Long Path Cell
components	parts	optical board laptop with PCI-card 36 m Herriot cell vacuum pump system water cooling system
parameter	power	230 V, max. 2 A (switch-on current 6 A) 115 V, max. 4 A (switch-on current 12 A)
	working range	+5 °C to +40 °C
QCL	tuning method	inter pulse mode (laser sweep mode) intra pulse mode (single pulse mode)
	pulse width	8 ns* ... 256 ns** * depends on the QCL and QCL-voltage used ** longer pulses on request
	pulse frequency	up to 1 MHz
	QCL temperature range	-35 °C to +40 °C
	QCL	tested and installed

[1] depends on species, temperature and pressure