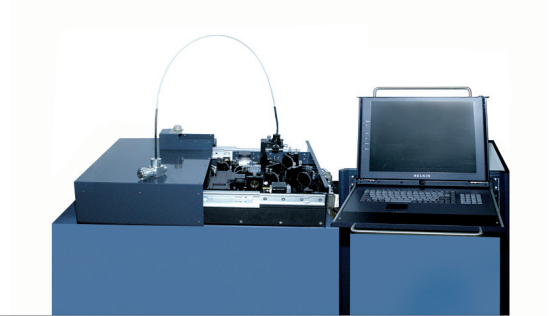


Q-MACS Process fibre



technical specification

The Q-MACS Process fibre is a portable monitoring system for on-line measurements of industrial processes. It bases on the Q-MACS Basic and features a two channel setup to achieve long-time stability and can be directly coupled to the measuring path via an IR-fibre. This system uses infrared absorption spectroscopy to measure absolute molecular concentrations.

head	description	two path infrared spectrometer with IR-light source, IR-fibre coupling
	sensitivity	up to ppb range [1]
	time resolution	up to millisecond
	size	710 mm x 440 mm x 1390 mm
	weight	125 kg
components	parts	optical board light guide cable coupling PC with external PCI-card box electronic supply system water cooling system
parameter	power	230 V, max. 2 A (switch-on current 6 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