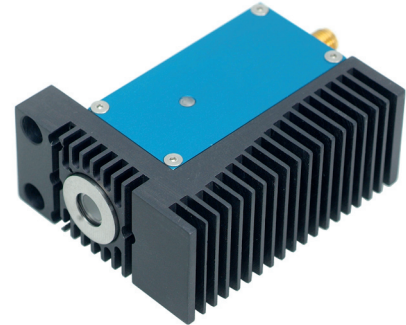


Q-MACS IR Detector (IRDM-600)

MID-INFRARED DETECTOR



technical specification

The Q-MACS Infrared Detector Module is a compact detector device for infrared absorption spectroscopic purposes. It includes an ultra-low-noise and fast pre-amplifier and a temperature controller for the thermo electrical cooling. Its dimensions are similar to the lighter-sized Q-MACS Basic 1.5 QC Laser head. The Q-MACS Infrared Detector Module allows on-line and fast measurements and can be utilized for research and industrial applications.

general	dimensions	25 mm x 25 mm x 50 mm [1]
	weight	62 g [1]
	supply voltage	+5 V/ 2 A on Binder RD04 Serie 707
	output	max. 0.3 V on 50 Ω SMA
	detectors	e.g. Vigo PVI-2TE/3TE, PDI-2TE/3TE
pre-amplifier	input voltage	± 2 mV
	output voltage	± 0.2 Vp-p @ 50 Ω
	gain	38 dB
	bandwidth	10 kHz – 600 MHz
	bias	adjustable up to 10 mA
temperature controller	max. TEC voltage	1.8 V
	max. TEC current	± 1.5 A
	temperature range	200 K to 240 K, 235 K typ.
	heat sink	air or water cooling

[1] without additional heat sink