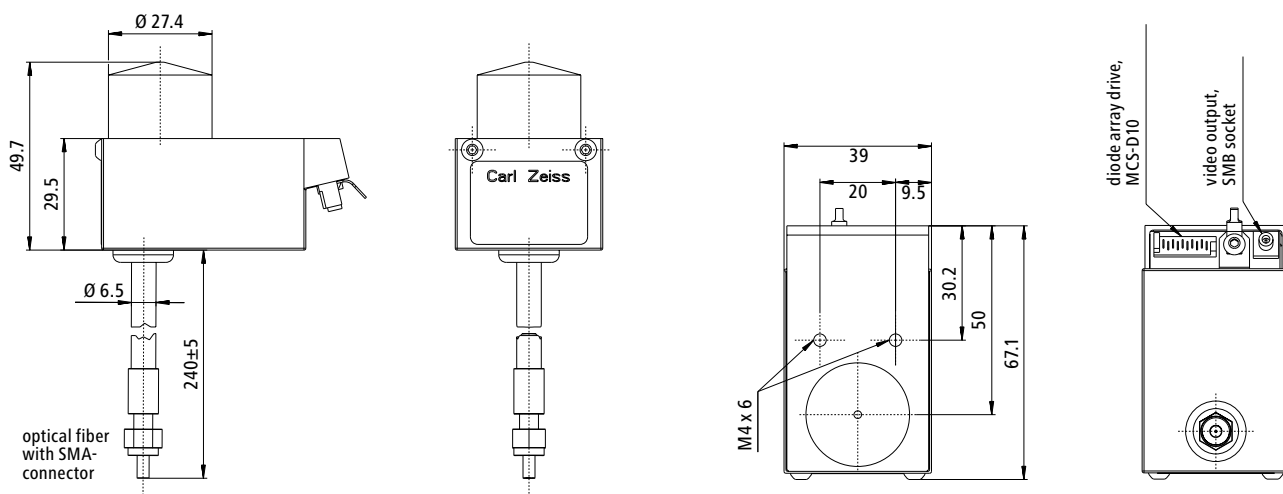


MMS 1

Technical Specifications

Optical entrance	input round	Fiber bundle consisting of approx. 30 quartz glass fibers with 70 µm core diameter each, designed as a cross section converter Diameter: 0.5 mm NA = 0.22 (has to be filled for full specification) mounted in SMA-coupling
	output linear	70 µm x 2500 µm (optical entrance)
Grating		Flat-field, 366 l/mm (center)
Diode array		Producer: Hamamatsu Type: S3904-256Q in a special housing (S5713) (S8381-256Q for MMS 1 NIR enhanced) Number pixels: 256
Spectral range		310 nm – 1100 nm specifications for the range 360 nm – 900 nm (UV-VIS enhanced) 400 nm – 1000 nm (NIR enhanced)
Wavelength accuracy		0.5 nm
Temperature – induced drift		< 0.01 nm/K
Mean spectral pixel pitch		$\Delta\lambda_{\text{Pixel}} \approx 3.3 \text{ nm}$
Resolution		$\Delta\lambda_{\text{FWHM}} \approx 10 \text{ nm}$
Sensitivity		$\approx 10^3 \text{ Vs/J}$
Straylight		$\leq 0.8 \%$ with Halogen lamp for UV-VIS enhanced as transmission at 450 nm with filter GG 495 $\leq 0.2 \%$ with Halogen lamp for NIR enhanced as transmission at 650 nm with filter RG 695
Dimensions	total (with case) cross section converter (external length)	70 x 50 x 40 mm ³ 240 mm standard, up to 1 m available



Order No.	Designation	Wavelength range	Description
224001-9001.000	MMS 1 UV/VIS enh.	310 – 1100 nm	PDA with 256 pixels, 240 mm external fiber length
224001-9011.000	MMS 1 UV/VIS enh.	310 – 1100 nm	PDA with 256 pixels, 180 mm external fiber length
000000-1233.038	MMS 1 NIR enh.	310 – 1100 nm	S8381 PDA with 256 pixels, 240 mm external fiber length

Order numbers for operating electronics → Page 27, Order numbers for software products → Page 53