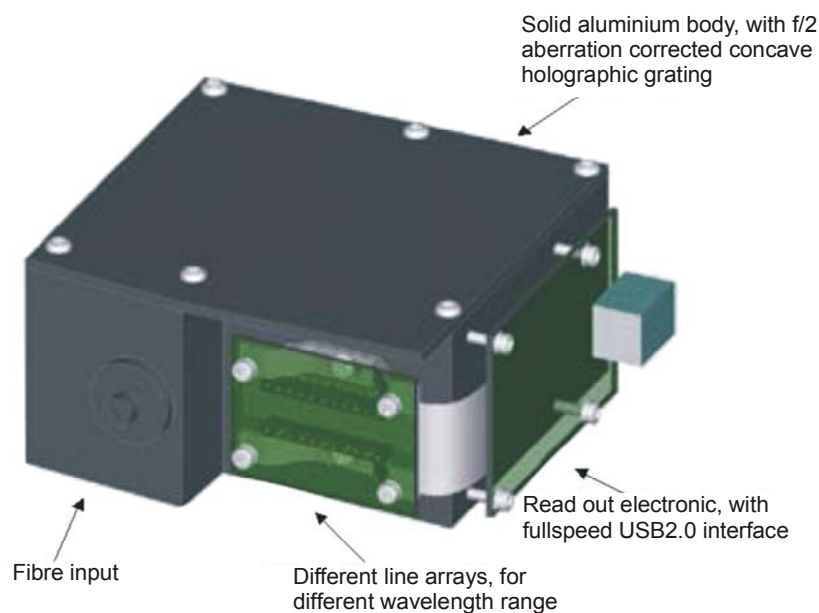


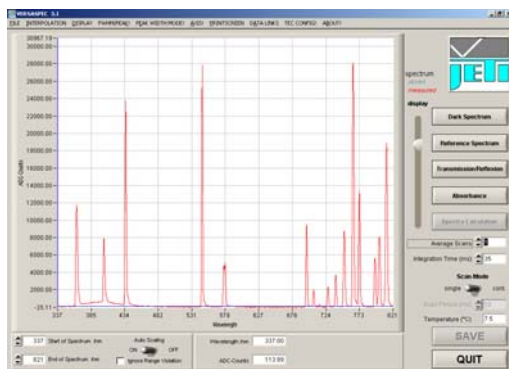


Spectrometer VS 70

The VS 70 spectrometer is a high resolution, small, portable, and rugged low cost linear array spectrometer. It covers the wavelength range of 200 – 900 nm. The spectrometer can be equipped with different line detectors (e.g. Hamamatsu S 9840, S837x, S390x) and hence tailored for the specific application. The device has a high throughput (f/2) and very low straylight. It communicates via true USB 2.0 plug and play interface. The unit is powered by USB (self powered hub or PC). Thermoelectric cooling is available optionally.



Principal drawing VS 70



Screenshot of a HgAr spectrum

The spectrometer can be operated with the intuitive measuring software VersaSpec (for a demo version see www.jeti.com).

The VersaSpec software measures reference, absorbance, transmission/reflection and allows different spectra calculations.

Another feature of the software is the real time export to Excel.

Specifications VS 70

Physical parameters	
Dimensions	107 mm x 101 mm x 50 mm
Weight	650 g
Optical Specifications	
Design	f/2, flatfield concave grating
Focal length	70 mm
Entrance aperture	100 μm wide input slit (optional 50 μm)
Fibre input	SMA 905
Dispersion	25 nm/mm
Wavelength range	200 - 900 nm (shift up to 950 nm is possible)
Wavelength accuracy	< 0.5 nm
Optical Resolution	~3 nm FWHM @ 100 μm slit ~1.5 nm FWHM @ 50 μm slit
Pixel Resolution	~0.35 nm/pixel (S 9840)
Stray light	<0,2‰ (GG 495 nm, $\lambda = 420 \text{ nm} / 600 \text{ nm}$)
Detectors	
	Hamamatsu S 837x (256, 512 or 1024 pixel of 25 $\mu\text{m} / 50 \mu\text{m} \times 500 \mu\text{m}$) Hamamatsu S390x (256, 512 or 1024 pixel of 25 $\mu\text{m} / 50 \mu\text{m} \times 500 \mu\text{m}$) Hamamatsu S 9840 (2048 pixel of 14 $\mu\text{m} \times 196 \mu\text{m}$)
Electrical parameters	
SNR	> 6000 (S 837x), > 10 000 (S 390x), > 2000 (S 9840)
A/D resolution	16 bit
Integration time	5-65000 ms
Interface	USB 2.0 fullspeed (RS 232, SPI, TTL UART optional)
Power supply	Powered by USB (self powered hub or PC)
TE Cooling	Optional (additional 6...12 V, 1 A power supply necessary)

JETI Technische Instrumente GmbH
Tatzendpromenade 2
D-07745 Jena

Tel. +49(3641)225 680
Fax. +49(3641)225 681
e-mail: sales @ jeti.com
Internet: www.jeti.com