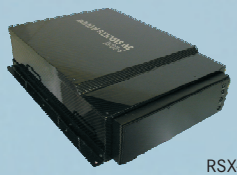
Technical specifications



RSX-4 (16L)

RSX-5
(16L with 4L up detectors)

Spectrometer	
Channels	1024
Differential nonlinearity	<0.2% over top 99.5%
Integral nonlinearity	<0.01% over top 99.5%
Zero dead time(1)	✔
Baseline restoration	Digital (IPBR) [2]
Pulse shaping	Digital (AOPS)[3]
Pile-up rejection	Digital (<40nS)
Pile-up contamination	<1% @ 250kcps
Sample rate	0.1-10 sec^{-1}
Timing	Internal/External
Gain stabilization	Automatic multi-peak
I/O	Ethernet
	RS-232 19200-115200 bit/s
	USB memory stick
Outputs	
Composite spectrum	✔
Individual spectra	✔
State of health	✔
Inputs	
Detector configuration	✔
Operational parameters	✔
Trigger signal	✔
Calibration data	✔

Detectors		
RSX-4		4 x 4L NaI(Tl)
RSX-5		4+1 x 4L NaI(Tl)
Energy resolution		<8.5%[4]
Power		
	RSX-4	9-40 VDC, 50 W
	RSX-5	9-40 VDC, 55 W
Weight		
	RSX-4	91 kg (200 lb)
	RSX-5	114 kg (250 lb)
Size		
	RSX-4	690 mm x 573mm x 177mm[5] (28.80in x 22.56in x 6.97in)
	RSX-5	690 mm x 573mm x 288mm (28.80in x 22.56in x 11.32in)[5]
Environmental		
Operating Temp.		-30°C to +45°C

Notes

(1) The RS-500 has no dead time in a traditional sense. A live time clock will be adjusted for loss of system measured pile-up rejections to give an apparent dead time to ensure the absolute count rate is correct.

(2) IPBR - Individual Pulse Baseline Restoration. The baseline is established for each individual pulse for maximum pulse height accuracy.

(3) AOPS - Automatic Optimized Pulse Shaping. Pulses are continuously analyzed and the signal pulse shaping adjusted for optimum performance.

(4) Stated energy resolution is for new systems. Refurbished system performance depends on quality of Xtals supplied.

(5) The dimension includes removable mounting rails

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