

UV-VIS-IR spectrometer TroSpec EF



Compact UV-VIS-IR spectrometer based on the vertical Z-shaped symmetrical Eberts-Fastie layout

This product is less sensitive to stray light therefore provides high sensitivity with low noise level. The TroSpec EF contains replaceable gratings and a wide range of focal lengths, which makes the spectrometer a perfect and flexible instrument for multipurpose measurements in a broad range of applications.

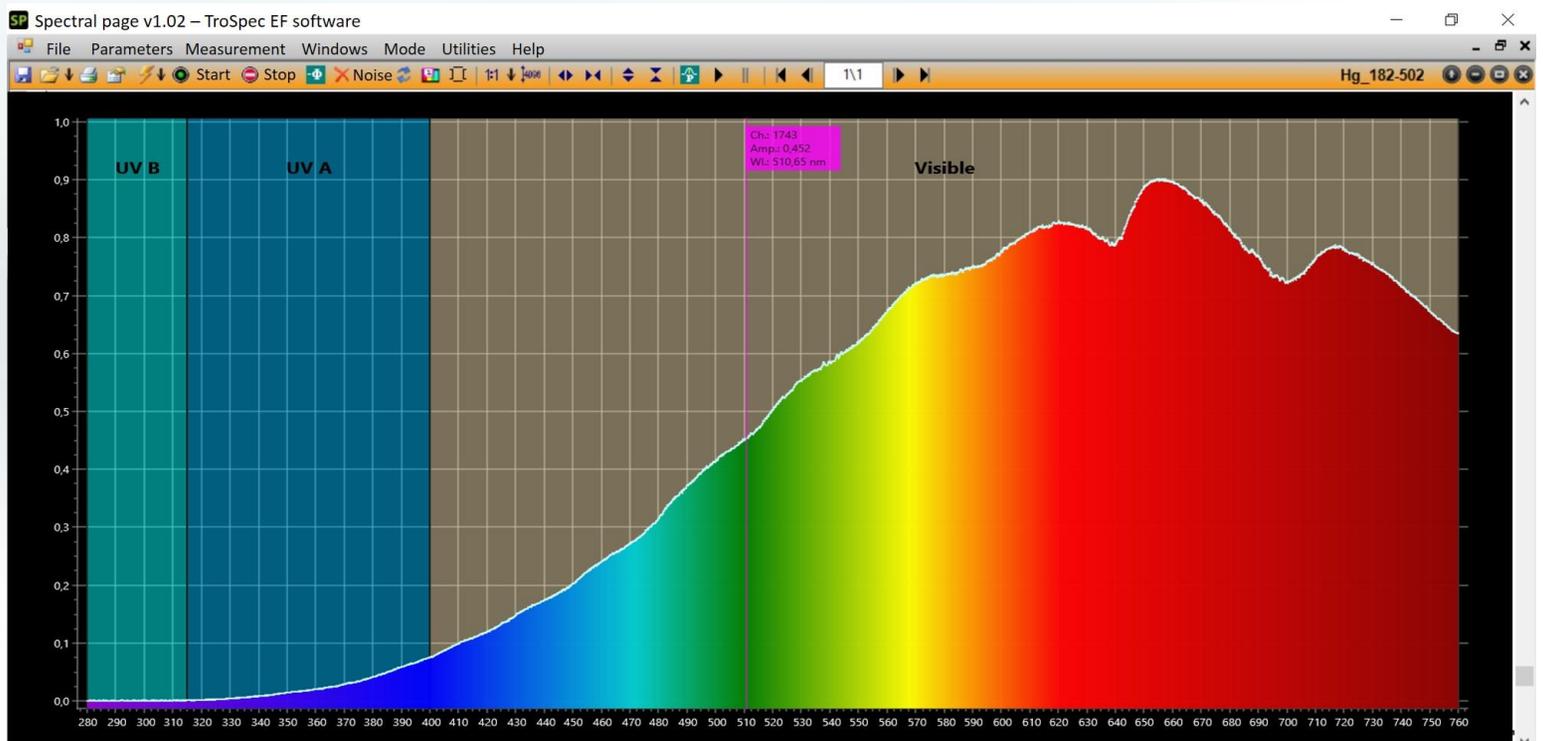
Features of the design:

- High resolution and low stray light
- Wide variety of gratings and detectors
- USB-powered
- Fiber input
- Internal/external triggering
- Modular design
- SDK for integrating spectrometer into customer's setup and software
- Customization is possible
- Compact size: 85x80x150mm

TroSpec EF is available in several configurations allowing the user to adjust the instrument for very specific tasks, which require certain parameters:

- Focal length: 75 – 300 mm
- Gratings: 300 - 3600 lines/mm
- Spectral resolution: 0.11 – 1.3 nm
- Usable range: from 190 up to 1100 nm

Our spectrometer is delivered with spectrum acquisition software:



ISTEQ's team are ready to help you develop a specific solution for your particular need.

Available TroSpec EF configurations:

TroSpec EF75				
Focal length, mm		75		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
600	21.9	0.9	625	190-1100
1200	10.4	0.4	295	190-1100
1800	6.4	0.26	180	190-900
2400	4.8	0.2	140	190-650
3600	3.0	0.12	85	190-450

TroSpec EF100				
Focal length, mm		100		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
300	33	1,3	960	190-1100
600	16,6	0.7	480	190-1100
1200	8,3	0.33	240	190-1100
1800	4,8	0.2	140	190-900
2400	3,6	0.14	103	190-650

TroSpec EF120				
Focal length, mm		120		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
300	27.7	1.1	790	190-1100
600	13.6	0.55	390	190-1100
1200	6.5	0.25	185	190-1100
1800	4.0	0.16	115	190-900
2400	3.0	0.11	85	190-650

TroSpec EF150				
Focal length, mm		150		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
300	22.1	0.9	630	190-1100
600	10.9	0.44	310	190-1100
1200	5.2	0.21	150	190-1100
1800	3.2	0.13	90	190-900
2400	2.4	0.1	70	190-650

TroSpec EF200				
Focal length, mm		200		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
300	16.6	0.66	475	190-1100
600	8.2	0.33	235	190-1100
1200	3.9	0.16	110	190-1100
1800	2.4	0.1	70	190-900
2400	1.8	0.07	50	190-650

TroSpec EF300				
Focal length, mm		300		
Relative aperture (d/f)		1/6		
Input slit opening, um		Fixed size, 10um and more		
Gratings, lines/mm (1 order)	Reciprocal linear dispersion, nm/mm	Spectral resolution, nm	Spectral range, nm	Useable range, nm
300	11.1	0.44	320	190-1100
600	5.5	0.22	160	190-1100
1200	2.6	0.1	75	190-1100
1800	1.6	0.064	45	190-900
2400	1.2	0.048	35	190-650