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Tara Ofogh Fanavar



TARA OFOGH FANAVAR

TARA SPECTROMETER TaraSpec

TaraSpec

is a family of powerful spectrometers that presents great spectral response in the range of UV and visible with the optical resolution (FWHM) of 0.1nm. TaraSpec is known by its high-sensitivity in low light applications and high-speed spectral acquisition. Therefore is a suitable choice for the applications that require high photometric sensitivity like fluorescence, DNA sequencing and Raman analysis. Small size, light weight and easy operation of TaraSpec make it perfect for the daily lab measurements. It also easily can be integrated to the other spectroscopic-based devices especially where space is limited. TaraSpec benefits from 3648 pixel linear-array CCD which provide a high optical resolution. A 16-bit A/D converter with a high speed serial interface brings fast data acquisition and transfer.



TARA SPECTROMETER



Application

- Determine the specification of lasers, LEDs and light sources in UV-visible range
- Absorption, reflection and transmission spectrum detection
- Chemometry applications
- Pharmaceutical analysis
- Biomedical science applications like DNA and RNA analysis
- Colorimetry
- Food industry
- Inline control of process
- Trace gas sensing

Technical Data

Model	Venus	Heliya
Physical Properties		
Dimension	150*110*33 mm ³	66*66*40 mm ³
Weight	500 gr	300 gr
Operation Temperature	0-50 °C	
Optical specification		
Optical bench design	Czerny turner	
Grating	300 line/holographic-grating	900 line/holographic-grating
Fiber Connector	SMA 905	
Slit Size	50 μs	
Wavelength range	190 - 1100 nm	400 - 750 nm
Integration time	10 μs - 15 min	
Optical reselution	0.1 nm(FWHM)	
Signal to noise ratio	600:1	
Dynamic range	2.1*10 ⁸ (system); 1400:1 for a single acquisition	
Stray light	<0.05% at 650 nm; 0.10% at 450 nm	
Detector specification		
Detector brand	Toshiba TCD1304 linear CCD array	
Pixles	3648 pixles	
Electronics		
Power supply	12 VDC 160 mA	
Power interface	Coaxial power connector, 2 mm	
Data transfer interface	USB Micro 2.0, high speed 480 Mbps	

Features

- Working in UV-visible spectral ranges
- Excellent spectral response below 300nm
- 3648 pixel linear CCD array
- High spectral resolution of 0.1nm
- 16-bit a/d-converter
- High speed data acquisition up to 100 frame per second
- Low integration time
- High sensitivity
- Low stray light
- High stability
- Easy to use
- Handy and compact size

ABOUT US

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