

BaySpec's **NirSpector™** transportable benchtop VIS-NIR spectrometer is a turn-key system designed to meet real-world analytical challenges for best-in-class performance, long-term reliability, and mobility. Benefiting from BaySpec's experience manufacturing high-volume, high-efficiency spectrometer devices for various industries and research sectors, The NirSpector™ utilizes low-cost, high-performance field-proven components.

Applications:

- Pharmaceuticals
- Medical Diagnostics
- Agriculture
- Semiconductors
- Beverage & Brewery
- Cosmetics
- Explosives detection
- Counterfeit detection
- Water quality
- Food safety
- Petrochemical
- Law Enforcement
- Pulp & Paper
- Mining
- Oil Exploration
- Biomedical Research
- Homeland Security

The **NirSpector™** system integrates spectrometer, active-trigger probe, light source and computer together in a ruggedized whole device. It employs highly efficient *Volume Phase Gratings* (VPG®) as the spectral dispersion element, thereby providing high-speed parallel processing and continuous spectrum measurements. The active-trigger probe and transmittance sampling accessory provide the most versatile sampling options for vastly different sample conditions. Included **NIRSpec 20/20** software is streamlined with spectral library management. This instrument can dramatically increase analytical horsepower in numerous fields such as material quality detection, monitoring and in process automation technology (PAT).

Key Features

- No moving parts reliability
- Turn-key system with embedded computer
- Transportable, battery-powered system enables chemical analysis on the field
- Covers wavelength ranges from 400-1700 nm
- Switchable active trigger probe or transmittance sampling accessory for flexible spectral collection
- Real-time spectral data acquisition with fast milli-sec response time
- Outstanding optical throughput is achieved with VPG® and f/2 design



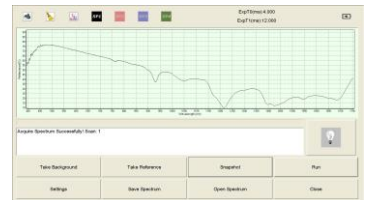
Active Trigger Probe



Parameter	Specification
PERFORMANCE	
Wavelength Range	400-1700nm or any fraction of range customer specified
Resolution	5-20 nm, slit dependent
Signal / Noise	5000:1
Stray Light	0.05%
Wavelength Calibration	Factory Calibrated
Integration Time	3ms to 30 seconds
Dimensions (mm)	305 (d) x 380 (w) x 168 (h)
Weight	12lb
OPTICS	
f/ Number	f/2
Grating	Custom Volume Phase Grating (VPG)®
DETECTOR SPECS	
Quantum Efficiency @λpk Min.	70%
Response Non-uniformity	±10%
A/D Converter	16bit
Power	Powered through USB
COMPUTER	
Operating System	Windows-based (32 or 64 bit)
System Control	Onboard touchscreen or external PC
GUI	NirSpec 20/20 Windows XP/Vista/7
Data Ports	USB 2.0
Security	Tiered password structure (3 levels), event logging and reporting
Internal Storage	16 GB
Wireless Connectivity	WiFi (optional)

*specifications subject to change

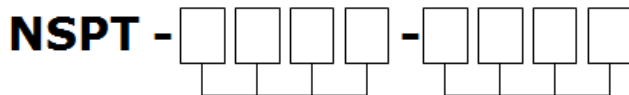
"NirSpec 2020" Software



BaySpec's "NirSpec 2020" software included, a Windows-based package with flexible data acquisition, processing and output functionality

BaySpec SDK, a software development kit for new applications development and integration into to your host software systems.

Part Number Selection:



Code	Starting λ	Code	Ending λ
Please specify the starting wavelength i.e. :		Please specify the ending wavelength i.e. :	
0200	200.00 nm	1700	1700.00 nm
0400	400.00nm	2200	2200.00 nm
0900	900.00 nm	2500	2500.00 nm
xxxx	customer specify	yyyy	customer specify

