



Fast, Precise Mineral Exploration

A mainstay in the geological research community, the TerraSpec® line of mineral analyzers is already recognized as the de facto technology for mineralogical analysis. Highly portable and rugged with expanded wireless capabilities, the TerraSpec 4 Hi-Res mineral analyzer, with 6 nm resolution, helps you determine the viability of mineral exploration targets faster than ever before. With enhanced performance in the SWIR 1 and 2 regions, enjoy even faster, more accurate spectral data collection, especially for samples with darker mineral features.

- Enhanced optics provide more precise spectral results for superior spectrum clarity and definition
- Double the performance in the SWIR 1/SWIR 2 regions for better alteration mineral analysis
- Improved portability features (new backpack and standard 802.11g Wi-Fi) let you move through an exploration field site more freely
- Non-destructive measurement means fast field scans.

UNIQUE APPLICATIONS:

- Mineral exploration
- Deposit mapping
- Mineral assemblage identification
- Drill cuttings analysis
- Core logging
- Early stage exploration





For mining exploration geologists, these improvements translate into faster data capture and improved data quality. The enhancements also allow accurate assessment of low-concentration and low-reflectance minerals, like iron-containing minerals such as serpentines and chlorites, which were previously difficult to measure.

The TerraSpec 4 Hi-Res mineral analyzer has been optimized for a range of mineral exploration applications, including deposit mapping.

TerraSpec 4 Hi-Res Specifications

PERFORMANCE

Wavelength range 350-2500 nm

Resolution 3 nm @ 700 nm and 6 nm @ 1400/2100 nm

Scanning time 100 milliseconds

Signal-to-noise ratio

 VNIR
 9,000:1 @ 700 nm

 SWIR 1
 9,000:1 @ 1400 nm

 SWIR 2
 4,000:1 @ 2100 nm

Stray light VNIR: 5000:1 (0.02%) NIR: 10,000:1 (0.01%)

Wavelength reproducibility 0.1 nm Wavelength accuracy 0.5 nm

Channels 2151

VNIR detector (350-1000 nm) 512 element silicon array

SWIR 1 & 2 detectors (1001-1800 nm) & (1801-2500 nm) Graded Index InGaAs Photodiode,

TE Cooled

CERTIFICATION AND APPROVALS

CE certified EN61010-1:2001 2nd Edition EU Directive 2006/95/EC, 2004/108/EC

NIST traceable calibration WEEE Compliance

COMMUNICATIONS

Wired 10/100 Base T Ethernet port with

Ethernet cross-over cable

Wireless 802.11g wireless card

PHYSICAL & ENVIRONMENTAL

Dimensions (H x W x D) 12.7 x 36.8 x 29.2 cm (5 x 14.5 x 11.5 in)

Weight 5.44 kg (12 lbs)
Battery weight 1.2 kg (2.7 lbs)

Battery run time Approximately 6 hours

(without lamps or accessories)

Operating temperature 0 to 40° C (32 to 104° F) Storage temperature -15 to 45° C (5 to 113° F)

Input power AC/DC switching power supply and a sealed lead-acid gel cell battery

90-240 VAC, 50/60 Hz

DO :----t 10 V/DO CO W

DC input 12 VDC, 60 W

Auxiliary port power Output, +12 VDC, 27 Watt (max)

ADDITIONAL DETAILS

AC input

Software RS^{3™} spectral acquisition software,

Compatibility with The Spectral Geologist and SpecMin, Seamless interface with ENVI®, ASD ViewSpec™ Pro for post processing, optional Indico® Pro

Portability Rugged instrument transportation case;

optional customized backpack with

soft-sided travel bag

Warranty One year full warranty including expert

customer support

Computer Windows® 7 64-bit laptop

(instrument controller)

For more information contact: