



BTT's MICROSPEC-6™ is a powerful, portable spectroscopic survey system for the detection, identification, and measurement of ionizing radiation.

This rugged system features multiple modes to address a broad range of missions, including dosimetry, spectroscopy, and radiation mapping. The system is compatible with BTT's advanced suite of fully-spectroscopic gamma, neutron, X-ray and beta probes—a feature which makes the MICROSPEC-6™ one of the most versatile portable spectroscopy systems available.

Like previous generations of proven MICROSPEC™ radiation detection systems, the MICROSPEC-6™ is simple to use in the field and provides both basic and advanced information so that users can make the right decisions at the right time. Spectroscopic data provides isotope identification, while real-time dose-rate mapping provides actionable information to guide search and emergency response missions.

- Compatible with BTT's advanced spectroscopic probes (gamma, neutron with gamma suppression, X-ray, and beta with gamma suppression).
- Provides isotope-specific dose and dose rate, detailed spectroscopic data, and real-time dose rate mapping via on-board GPS.
- Comprehensive, user-accessible isotope library with automatic peak search and isotope identification.
- RS-232 and USB communication.
- Splash and dust resistant (MIL810E).
- Runs on a rugged, compact Panasonic Toughbook tablet. Also compatible with laptops.
- Remote operation by wireless link (optional).

# MICROSPEC-6™

## Technical Specifications

(Visit [www.bubbletech.ca](http://www.bubbletech.ca) for more information)

### PHYSICAL SIZE

Analyzer: 27.9 x 22.9 x 4.8 cm (11.0 x 9.0 x 1.9 in)  
2.9 kg (6.5 lb)  
Tablet: 17.8 x 14.0 x 6.4 cm (7.0 x 5.5 x 2.5 in)  
1.1 kg (2.5 lb)  
Probe: 1.5 to 4.0 kg (3.3 to 8.8 lb)  
(Varies with probe type)

### POWER

Type: Built-in rechargeable NiMH battery or external 12-32 V power supply (selectable)  
Runtime: >16 hours, fully charged  
Charger: 110 – 240 V, 50/60 Hz autosensing

### TEMPERATURE

Operating: -20 °C to +40 °C (-4 °F to +104 °F)  
Storage: -40 °C to +70 °C (-40 °F to +158 °F)

### SPECTROSCOPIC PROBES\*

Gamma: NaI (various sizes)  
50 keV to 8 MeV  
X-ray: NaI with Be window  
5 keV to 200 keV  
Beta: Phoswich scintillator  
100 keV to 3 MeV  
Neutron: Liquid scintillator and <sup>3</sup>He counter  
Thermal to 20 MeV

*\*Additional data sheets available for probes*

### OPTIONS

RS232-based transceiver system for remote control and data acquisition

### OPERATING MODES

#### Dosimetry:

- Dose rate and cumulative dose in both mrem and  $\mu$ Sv units
- H\*(10), H'(0.07,0°), H'(3,0°) dose conventions
- Region-of-interest specific dose
- Two level audio/visual alarms

#### Spectroscopy:

- Automatic peak search and isotope identification
- 1 second spectrum update
- Dose and dose rate information
- Region-of-interest dose

#### Mapping:

- On-board GPS
- Full spectrum available at each measurement point
- Scalable grids for map display
- Spectral region-of-interest mapping

