



- State-of-the-art, portable, directional system for detection, identification, and localization of radioactive sources.
- Compact detection unit is contained in a rugged, weatherproof enclosure that can be inserted in a backpack, placed in a different carrier, or used on its own.
- Connects by secure Wi-Fi to one or more Android/iOS phones or tablets running the FlexSpec Backpack software.
- Includes two high-sensitivity, spectroscopic gamma detectors, with Geiger-Mueller tubes for extreme dose rates. Supports optional neutron detectors with moderators.
- Provides immediate and reliable isotope identification and alarm categorization using field-proven analysis software. Includes audible, visual, and vibration alarms.
- Can be configured for non-spectroscopic gross counting or spectroscopic isotope-identification modes by factory setting or by authorized users.
- Performs automatic energy calibration using background radiation, eliminating the need for check sources.
- Features Dynamic Background Compensation to automatically adjust for background variability, providing optimum performance in real field conditions.
- Includes GPS-tagged data and advanced reachback support capabilities for reporting and alarm adjudication.

Technical Specifications

DIMENSIONS/WEIGHT: 15.8”(H) x 11.7”(W) x 3.2”(D)/15 lb (without neutron detector or backpack).

GAMMA SENSORS: Two 2” diameter x 4” long NaI crystals, with energy resolution <8% at 662 keV using 2048 spectral channels, provide left/right localization of gamma sources. Geiger-Mueller tubes for operation at dose rates up to 500 R/h.

NEUTRON SENSORS: Options for ^3He or non- ^3He neutron detectors, with integrated moderators.

SOFTWARE: Software runs on smartphones or tablets, with an intuitive user interface ideally suited for the Preventive Radiological/Nuclear Detection mission. Provides dose rate and user-selectable displays of counts or spectral plots. With spectroscopy enabled, system delivers high-performance, proven isotope identification and alarm categorization (threat, suspect, industrial, medical, NORM) with directional indicators. Customizable library contains over 40 isotopes, including all isotopes from ANSI N42.53. FlexLink software enables detection units to be wirelessly linked to operate as a single system.

CONNECTIVITY: Detection unit connects by secure Wi-Fi to one or more Android or iOS smartphones or tablets. Bluetooth connection to an earpiece enables discreet audible alarms if desired.

REACHBACK: All data are GPS-tagged and time-stamped. Cellular connection allows data to be rapidly sent from the field to reachback centers. Data can also be transferred to a laptop over Wi-Fi or wired connection. FlexSpec Backpack software automatically populates key fields for US DHS Joint Analysis Center (JAC) reports, or other custom reachback reports. Data provided in ANSI N42.42 (2012)-compliant format.

POWER: Rechargeable, hot-swappable, Li-ion battery packs with >12 h run-time.

TEMPERATURE: Operating -20°C to +50°C (-4°F to +122°F). Storage -40°C to +70°C (-40°F to +158°F).