

STRIDE 300

Stanchion Detection Unit



SERIES 300 STANCHION DETECTION UNITS AND STANCHIONSPEC™ SYSTEMS

The **STRIDE Series 300** stanchion detection units have been designed primarily for pedestrian security installations. The stanchion detection unit looks and works exactly the same as a standard crowd control stanchion. It has an extendable belt on top, the post and a weighted base. These units are available in wired or wireless versions. If wired, the stanchion will have an attached RJ-45 Ethernet cable for connection to a PoE LAN receptacle. Wireless systems will be completely covert to passengers or pedestrians. The stanchion base, weighted with lead for stability, will be replaced with a battery weighted base (batteries provided) with only a connector for an external battery charger to indicate any difference from a standard security stanchion.

A transceiver is required for communication via the LAN to the server computer where the STRIDE software is installed. STRIDE View has the ability to transmit messages and/or screens to another computer or to a PDA worn by the local security officer. The standard 2" diameter by 3" long NaI scintillation detector provides an excellent sensitivity even to small, low activity radiation sources. A typical time-to-nuclide-identification can be from a few seconds to 20 or 30 seconds, depending on the nuclide, the number of nuclides, the source activity, background and the presence or absence of shielding material.

A STRIDE stanchion SPEC consists of a stanchion detection unit with STRIDE Basic Communications software plus STRIDE Id, (nuclide identification) and STRIDE View (graphic user interface) software programs.

STRIDE detection units and systems were designed to detect the covert movement of special nuclear material or weapons into populated or other areas of concern and to identify the radionuclide.

FEATURES

- Covert installation in unobtrusive security stanchion
- Rapid detection of presence of radioactivity or radioactive material
- Nuclide identification
- Categorizes radiation as Innocent, Suspicious or Threat
- Alarms on dose rate changes above background
- Continually stabilizes for temperature and background changes
- RJ-45 Ethernet connection to LAN with PoE or WLAN with batteries
- Server and Client software packages available
- Visible and audible alarm annunciators
- Permanent event record storage
- Remote alerts to PCs, PDAs and similar devices

SPECIFICATIONS

Gamma Detector	2" diameter by 3" long NaI
γ Energy Range	20 keV to 3 meV
Energy Resolution	< 8% fWHm @ 662 keV
Neutron Detector	He3 gas filled ionization neutron detector with 10mm thick PE moderator (opt.)
He3 Detector	0.75" by 3" long, 8 atm
Neutron Sensitivity	per IAEA specifications for border monitoring equipment
High Dose Rate	Sealed Gm detector (optional)
Neutron Energy	0.025 eV to 15 meV
Operating Temperature	+5°F to +122°F (-15°C to 50°C)
Storage Temperature	-40°F to +203°F (-40°C to +95°C)
Operating Humidity	10% to 80%, non-condensing
Data Throughput	>100k cps
Data Input Rate	<300k cps
Corrections	Spectrum linearization
Spectrum	1024 channels 24 Bits per channel
Calibration Verification	Internal K ⁴⁰ (KCl) source
Dose Rate Range	0 to 100 μSv/h (0 to 10 mrem/h)
Dose Rate Resolution	10 nSv/h (1 μrem/h)
Dose Rate Energy	50 keV to 1.5 meV
Stabilization	Peak analyzing K ⁴⁰ or LED
Power	DC, Power over Ethernet (PoE) or rechargeable batteries in wireless unit
Communications	Direct RJ-45 Ethernet to LAN or Wireless LAN
WLAN	IEEE 802.11b/g, range ≥98' (30 meters)
Batteries	Exchangeable battery with status LEDs
Capacity	≥ 82 Wh
Operating Time	> 30 hours
Charge Time	< 22 hours
Internal UPS	2 mins to swap batteries
Battery Charger	AC/DC adapter
Dimensions	Tube: 36" x 2.6" (910 x 65 mm) Base: 14.2" D x 2.6"(360 x 50 mm)
Material	Black plastic tube, weighted base
Protection Rating	IP 54
Embedded Software	Microsoft CE 5.0
Interface	Stride xml language
Standards	IEC 60529, DIN EN 61000-3-2, DIN EN 61000-3-3, DIN EN 61326, DIN EN 1050, DIN EN 55014, DIN EN 6100, DIN EN 60204-1, DIN EN 61321, DIN EN 62244, IEC 62484

DETECTION UNIT MODELS

- DU 303-Nd: 2" x 3" NaI detector, K⁴⁰ source stabilization
- DU 303-N: 2" x 3" NaI detector, LED stabilization
- DU 303-NH: 2" x 3" NaI detector, LED stabilization, He³ neutron detector
- DU 303-NGH: NaI detector, LED stabilization, He³ neutron detector, G^M high dose-rate detector
- DU 303W-N: 2" x 3" NaI detector, LED stabilization, WLAN communication
- DU 303W-NH: 2" x 3" NaI detector, LED stabilization, He³ neutron detector, WLAN communication
- DU 303W-NGH: 2" x 3" NaI detector, LED stabilization, He³ neutron detector, GM high dose-rate detector, WLAN communication

