

DU 416.2TM

Maritime STRIDE Detection Units

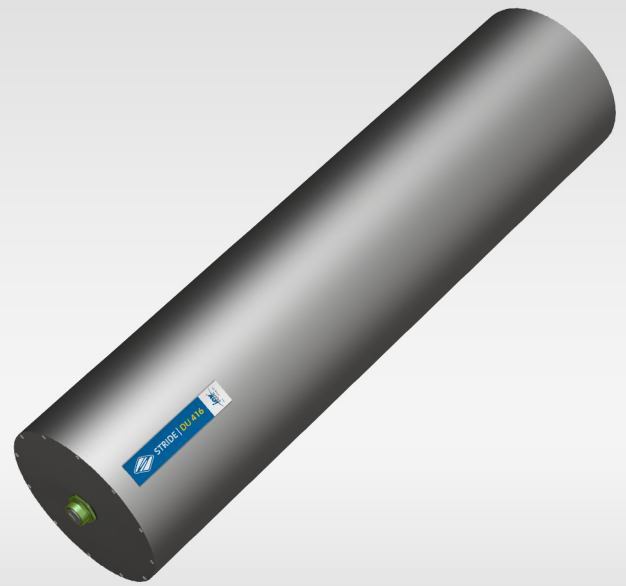
The covert movement of special nuclear material or weapons into populated areas represents possibly the greatest threat to the security of our world. Radionuclide identification systems are required to effectively detect and / or deter this threat. They must recognize the presence or movement of radioactive material across borders, into government buildings, at large public gatherings or events and much more plus identify the radionuclide(s) present. STRIDE Detection Units and Systems were designed for this very purpose.

STRIDE Maritime Gamma Detector with Nuclide Identification

The DU 416.2 was designed for a marine security group to be mounted on the deck of a cutter, to interrogate for the presence of radioactive material in a detained boat. This unit is produced in a weatherproof PVC tube, with an enlarged diameter for the larger, more sensitive 2" by 4" by 16" NaI detector and to allow for additional detector and electronics shock and vibration dampening material. Off-shore cutters and cruisers often encounter high seas that impact with great force against the hull of the boat. Without proper protection a scintillation detection system could become damaged beyond use. Operating power is supplied via an RJ-45 Ethernet communication or via separate dc voltage connections. All external cable connections are water and corrosion proof. An optional neutron detector is available.

STRIDE Monitor Network

The STRIDE DU 416.2 can be easily set up and configured through a web interface. This interface can also be used to monitor the status and the output of the instrument. The STRIDE Server software (sold separately) automatically detects any DU 416.2 connected to the network. Depending on the STRIDE Server configuration the DU 416.2 can be combined with other STRIDE detection units, resulting in a higher sensitivity and source tracking capability.



FEATURES & BENEFITS

- Waterproof sealed detection unit for maritime installations
- Very high sensitivity to the presence of radioactivity or radioactive material
- Detects the presence of radioactivity or radioactive material.
- Performs rapid and accurate radionuclide identification
- Alarms on dose rate changes above background
- Waterproof and corrosion proof cable connections.
- Continually stabilizes for temperature and background changes
- Works with all versions of STRIDE Server
- Can be combined with every other STRIDE Detection Unit

SPECIFICATIONS

INPUT/OUTPUT

Power Power over Ethernet

PHYSICAL

Dimensions (H × W × D) 894 mm (35.197") × 168 mm (6.614") × 139 mm (5.472"); 2 m (6'6.7") hose at the bottom

Weight w/o Cable 25.0 kg (55.12 lb)

ENVIRONMENTAL

Ambient/Operating Temperature -15 °C – +50 °C (5 °F – 122 °F)

Storage Temperature -30 °C – +70 °C (-22 °F – 158 °F)

Humidity ≤ 100 %

Protection Rating IP 54

PERFORMANCE

Energy Range (Gamma) 20 keV – 3 MeV

Throughput > 100 kcps

Input Count Rate 300 kcps

Corrections Spectrum linearization

Spectrum Data 1024 channels; 24 Bits per channel

Dose Rate Range 0 μSv/h – 100 μSv/h

Dose Rate Resolution 10 nSv/h

Dose Rate Accuracy ±30 % (50 keV – 1500 keV)

Energy Range (Dose Rate) 50 keV – 1500 keV

Measuring Modes PHA

Stabilization LED and ⁴⁰K

DETECTORS

Gamma NaI; 2 " × 4 " × 16 "

Gamma (High Dose Rate) Energy Compensated GM Detector

Neutron ^{*2} ³He Tube; 0.75 " × 3 "; 8 atm; surrounded by polyethelene moderator

STANDARDS

Standards 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

ACCESSORIES

Installation Kit Cable protective tube 2 m (8'2.4"); 4 × item T-Slot Nut 8 St M6 - 0.0.026.23

SOFTWARE

Embedded Software Windows CE Operating System

Interface STRIDE XML protocol

Complete specifications available on request.



VARIANTS

Following variations of this device are available. Specifications differing for the variants are marked in the table.

- *1 DU 416.2-NG Maritime STRIDE Detection Unit, NaI Detector, GM Tube
- *2 DU 416.2-NGH Maritime STRIDE Detection Unit, NaI Detector, GM Tube, ³He Tube

For situations not covered by these variants please contact our Marketing and Sales Department at the email address or phone number listed below.

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