TELEDYNE FLIR

IDENTIFINDER® S900

Flexible and Scalable Radiation Detectors









The identiFINDER® S900 is an autonomous sensor that delivers real-time radiation detection and identification. It detects the presence or movement of radioactive material across borders, into buildings, at large public gatherings, and events. It uses the same advanced template matching algorithms as the industry-leading identiFINDER® R-series to separate innocent material, such as medical patients, from threatening sources – a unique feature not offered by other area monitors. identiFINDER S900 units are available in a wide variety of form factors that can be tailored to application-specific environments and sensitivities. Deployment can begin with a standalone system and expand to include a network of systems as needs change. The detection units can be openly installed or concealed from view, allowing security personnel to interdict threats without alerting an individual it has been detected. It automatically calibrates and stabilizes without any user maintenance. The hassle-free operation and continuous data stream provided by identiFINDER S900 simplifies deployment and integration within existing security networks without disrupting daily activities.

RAPID, AUTONOMOUS MONITORING

Automatically analyzes collected data against extensive library when a change in background radiation is detected.

- Radiation identification within seconds
- Real-time situational awareness with continuous, rapid identification
- Locates position of source or tracks progression
- Autonomous operation frees security personnel for other vital security tasks

SCALABLE AND EXPANDABLE DEPLOYMENT ARCHITECTURE

Available in variety of sizes and housing and can be openly installed or concealed for high-consequence threat interdiction.

- Small form factor allows it to be concealed
- Easily integrates into existing security architecture or city-wide networks
- Interchangeable hardware minimizes downtime and simplifies deployment
- No user maintenance

SEPARATE BENIGN SOURCES FROM TRUE THREATS

Separates innocent material, such as medical patients, from threatening sources - a unique feature not offered by other area monitors.

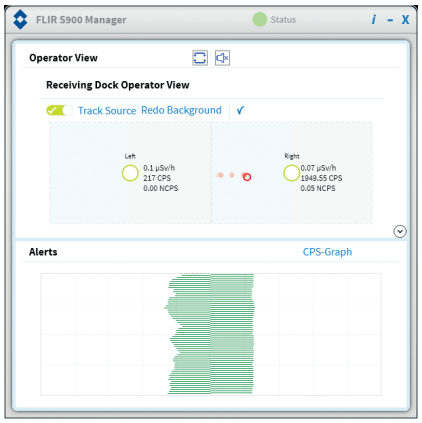
- Simple alarm screens and data presentation
- Analyzes, logs, and provides access to complex spectroscopic information
- Uniform responses with accurate summation of data

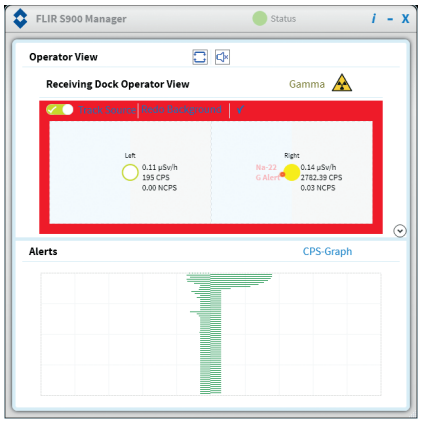
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SPECIFICATIONS

identiFINDER S900	
Technology	Autonomous radiation sensor
Product Variants	203.2-NG[1], 203.2-NGH[2], 403.3-NG[3], 403.3-NGH[4], 416.1-NG[5], 416.1-NGH[6]
Gamma (NaI)	2.0 x 3.0in (51 x 76mm); 2.0 x 4.0 x 16.0in (51 x 102 x 406mm)[5,6]
Gamma (High Dose Rate)	Energy compensated Geiger-Müller detector
Neutrons (He-3 PCT)	0.7 x 4.2in (19 x 106mm)[2,6]; 0.75 x 3.0in (19.05 x 76.2mm)[4]
Energy Range (Gamma)	20 keV - 3 MeV
Throughput	>100 kcps
Max. Input Count Rate	300 kcps
Dose Rate Range [1-4]	0.01 µµSv/h – 1 Sv/h (1.0 µrem/h – 100 rem/h)
Dose Rate Range [5-6]	0 µSv/h – 1 Sv/h (0 µrem/h – 100 rem/h)
Gamma Spectrum	1024 channels; 3 MeV
Dose Rate Accuracy	±30 %
Scintillator Operating Range [1-4]	0 µSv/h – 100 µSv/h (0 rem/h – 10 mrem/h)
Scintillator Operating Range [5-6]	0 µSv/h – 20 Sv/h (0 rem/h – 2.0 mrem/h)
Geiger-Müller Operating Range [1-4]	100 µSv/h – 10 mSv/h (10 mrem/h – 1.0 rem/h)
Geiger-Müller Operating Range [5-6]	20 µSv/h – 10 mSv/h (2.0 mrem/h – 1.0 rem/h)
Overload Threshold	10 mSv/h – 1 Sv/h (1.0 rem/h – 100 rem/h)
Neutron Sensitivity [2, 4, 6]	11 cps/nv; ±20 % thermal neutrons
Stabilization	K-40 calibration source and LED
Typical Resolution	≤8 % FWHM at 662 keV
Service Interval	Recommended two-year service interval
Sampling & Analysis	
Sample Introduction	Absorption of EM gamma or neutron emissions
Threats	Detects neutron or gamma radiation emitted from natural occurrences in the environment, special nuclear material, industrial, or medical material
Sampling & Analysis	From a few seconds to minutes
System Interface	
Display & Alerts	identiFINDER S900 Data Protocol for network integration
Communication	Ethernet RJ45, 10 Mbit/s, 100 Mbit/s
Embedded Software	Linux operating system
Training Requirements	<10 mins for operator; 1/2 day for advanced user

Power	
Input Voltage	DC 12V, 3W[1-6]; Power over Ethernet (PoE)[1-6]
Cold Start Time	15 mins from cold start
Environmental	
Operating Temp	-4 to 122 °F (-20 to 50 °C)
Operating Humidity	10 to 80%, non-condensing
Storage Temp	-22 to 158 °F (-30 to 70 °C)
Physical Features	
Dimensions (HxDia.) / Weight [1-2]	25.8 x 2.5 in (654 x 63 mm) / 5.3 lb (2.4 kg)
Dimensions (HxDia.) / Weight [3-4]	29.1 x 5.5 in (740 x 140 mm) / 17.6 lb (8.0 kg)
Dimensions (HxWxD) / Weight [5-6]	35.9 x 8.6 x 6.8 in (911 x 218 x 173 mm) / 46.3 lb (21.0 kg)
Enclosure & Protection	Aluminium[1-2, 5-6]; PVC-U[3,4]; protection ratings IP54[1-2], IP55[3-4], IP62[5-6]





Specifications are subject to change without notice.
For the most up-to-date specs, go to www.teledyneflir.com

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