

IDENTIFINDER® R300

Spectroscopic Pager for
Radiation Detection & Identification



The identiFINDER R300 is the world's highest performing, pager-sized Spectroscopic Personal Radiation Detector (SPRD). It provides continuous detection capability and full threat identification. The R300 can be deployed in place of existing Personal Radiation Detectors, or utilized as a confirmatory tool with the added capability of identifying the radioisotope present. The simple two-button user interface facilitates expedited threat response. Visible, audible, and tactile alarms rapidly alert the operator via the easy-to-read color display. On-board Bluetooth®, web server, and GPS technologies make interagency communication easier than ever. From One Touch Reachback™ to reliable radioisotope identification, the R300 is the most advanced SPRD available. With enough detector resolution to resolve complex spectra and enough stopping power to identify the full ANSI N42.48 library, the identiFINDER R300 is the ideal solution for belt-worn passive scanning, security checkpoints, border patrol, and first response.

CONFIDENT, BELT-WORN PASSIVE RADIOLOGICAL SCANNING

Compact but powerful with rapid visibility to threats

- CZT detector provides unmatched $\leq 3.5\%$ resolution in an SPRD
- Available in gamma only or gamma and neutron models
- Field-proven and trusted template matching algorithms shared with the rest of the identiFINDER line
- Excellent response time and low false alarms

RUGGED, IP67-RATED ENCLOSURE

Tough and mission-ready for fast front-line detection and response

- Weighs less than 1 lbs. for ease of use and portability
- Harsh environments and/or temporary submersion up to one meter during decontamination
- Drop-tested up to 1.5m

SIMPLE TWO-BUTTON INTERFACE WITH ONE TOUCH REACHBACK™

Built for on-the-go applications with fast, two-minute start up

- Immediately send full spectroscopic data and critical information with single push of a button
- Fully ANSI n42.42 and ANSI n42.48 compliant for identification performance
- No user maintenance required with automatic calibration and stabilization



SPECIFICATIONS

identiFINDER R300

Technology	Spectroscopic personal radiation detector (SPRD)
Product Variants	Z (gamma only) and ZH (gamma/neutron)
Gamma (CdZnTe)	Three crystals 0.6 x 0.5 x 0.2 in (15 x 13 x 5 mm)
Neutrons (He-3)	0.6 x 2.1 in (15 x 54 mm)
Energy Range (Gamma)	Identification channel 30 keV - 3 MeV
Gamma Spectrum	1024 channels; 3 MeV
Dose Rate / Accuracy (Cs-137)	≤100 nSv/h – 10 mSv/h (≤10 µrem/h – 1.0 rem/h); ±30 %
Overload Threshold	5 mSv/h
Neutron Sensitivity	2.6 cps/nv; ±20 %
Typical Resolution	≤3.5 % FWHM at 662 keV
Service Interval	5-year factory maintenance

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
Nuclide Identification	According to ANSI N42.48
Sampling & Analysis	From a few seconds to minutes

System Interface

Display & Alerts	Transflective color LCD
Communication	USB 2.0; mini-B socket; Bluetooth® ≤50m range (removable)
Data Storage	2GB internal memory; up to 600,000 spectra
Training Requirements	<10 mins for operator; 1 day for advanced user
Software	On-board webserver software

Power

Input Voltage	100-240 VAC (wall and car adapters and USB cable supplied)
Battery Specs	Internal single cell Li-ion; ≥24h operational battery life; recharge ≤3h when using AC; recharge >5.5h when using USB
Startup Time	<2 mins from cold start

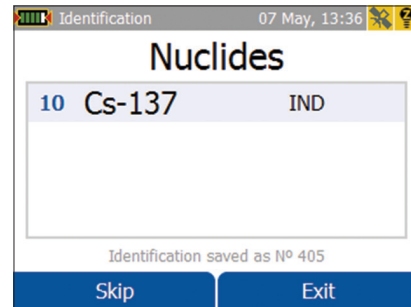
Specifications are subject to change without notice.
For the most up-to-date specs, go to www.teledyneflir.com

Environmental

Operating Temperature	-4 to 122 °F (-20 to 50 °C)
Operating Humidity	10 to 93%
Storage Temperature	14 to 95 °F (-10 to 35 °C)

Physical Features

Dimensions (L x W x H)	1.3 x 2.8 x 4.9 in (3.3 x 7.0 x 12.5 cm) - with battery
Weight	≤0.8 lb (0.4 kg)
Enclosure & Protection	Aluminum housing; protection rating IP67 according to IEC 60529



AMERICAS

7055 Troy Hill Dr. Suite 300
Elkridge, MD 21075 USA

APAC

10 Kallang Avenue #09-10
Aperia Tower 2
Singapore 335910

EMEA

Luxemburgstraat 2
2321 Meer
Belgium

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Revised on 11/10/21
identiFINDER R300_Datasheet-LTR 21-1110