The FLIR identiFINDER R400 is the most widely deployed handheld radiation detection and identification product in the world. At half the size and weight of competitive radioisotope identification devices (RIID), the R400 helps operators feel comfortable using the instrument even in the most hazardous and stressful environments. Operators use the handheld R400 to detect, quickly locate, measure, and identify the source of radioactive material. Like other identiFINDER R-series products, the R400 contains on-board Bluetooth, web server, and GPS technologies and produces rapid visible, audible, and tactile alerts that expedite response measures. The common operating interface reduces training time and costs, while increasing operator confidence and inter-operability between agencies using FLIR products. The identiFINDER R400 provides operators the ideal balance of size and weight for a wide variety of monitoring scenarios including all-purpose surveying, emergency response, and environmental monitoring. With over 20,000 devices deployed globally, it is the most trusted RIID in the world.

CUSTOM APPLICATIONS
- All-purpose surveying
- Emergency response
- Environmental monitoring
- Port and border scanning

FEATURES & BENEFITS
- Field-proven with over 20,000 units deployed globally
- Gamma and neutron detection
- Identifies ANSI N42.34 library
- High resolution and low false alarms
- Rapid visible, audible, and tactile alerts
- Fast two-minute start up
- 5 year factory maintenance interval
SPECIFICATIONS

Technology
Radioisotope identification device (RIID)

Product Variants
NG1, NGH2, ULCS-NG3, ULK-NG5, ULK-NGH6, UW-NG7, R400-UW-NGH8, UW-ULCS-NG9, UW-ULCS-NGH10, T11, T12, LG13, LGH14

Gamma (Nal) 1-10
1.4 x 2.0 in (35 x 51 mm)

Gamma (Nal) 11-12
0.9 x 0.8 in (23 x 21 mm) - Tungsten shielded

Gamma (LaBr3) 13-14
1.2 x 1.2 in (30 x 30 mm)

Neutrons (He-3) 2,4,6,8,10
0.6 x 2.1 in (15 x 54 mm)

Gamma (High Dose Rate)
Geiger-Muller

Energy Range (Gamma)
20 keV - 3 MeV

Gamma Spectrum
1024 channels; 3 MeV

Dose Rate / Accuracy (Cs-137)
0 nrem/h - 1.0 rem/h (0 nSv/h - 10.00 mSv/h); ±30 %

Scintillator Dose Rate Range
0 nrem/h - 50 mrem/h (0 nSv/h - 500 uSv/h)

Geiger-Muller Dose Rate Range
10 mrem/h - 1.0 rem/h (100 uSv/h - 10 mSv/h)

Dose Range
0 nSv - 1 Sv (0 nrem - 100 rem)

Overload Dose Rate Range
1.0 rem/h - 100 rem/h (10 mSv/h - 1 Sv/h)

Neutron Sensitivity
2,4,6,8,10, 14
4.5 cps/nv; ±20 %

Stabilization
Variants 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12; Calibration source

Typical Resolution
Variants 1-12: ±8 % FWHM; 13, 14: 4.5 % 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 N42.34

Sampling & Analysis
From a few seconds to minutes

System Interface

Display & Alerts
Transflective color LCD

Communication
USB 2.0; micro-B socket 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 or LEMO Series K socket 7, 8, 9, 10; Bluetooth Class 2.0, 10m range (removable)

Data Storage
2GB internal memory; up to 600,000 spectra

Training Requirements
<10 mins for operator; 1 day for advanced use

GPS (removable)
12-channel SiRF III receiver

Software
On-board webservice software

Power

Input Voltage
100-240 VAC (wall and car adapters and USB cable supplied)

Battery Specs
Either rechargeable NiMH or 4x AA pack (supplied); .8h operational battery life; recharge ~4h when using AC; recharge >4h when using USB

Cold Start Time
<2 mins from cold start

Environmental

Operating Temp
-4 to 122 °F (-20 to 50 °C)

Operating Humidity
10 to 80%; variants 7, 8, 9, 10 .100 %

Storage Temp
14 to 95 °F (-10 to 35 °C)

Physical Features

Dimensions (L x W x H)
.3.7 x 10.6 x 3.2 in (9.4 x 26.9 x 8.1 cm) - with battery

Weight
.3 lbs (.1.5 kg)

Enclosure & Protection
Aluminum housing; protection rating IP53 according to IEC 60529 variants 7, 8, 9, 10 IP68 according to IEC 60529; 10 m; 8 h