

Model ICS-4000

Radionuclide Identifier

Radiation Detection for a Safer World



Features

- Dual Analysis Capability
- Multiple Modes of Operation
- Lightweight, Easy to Use
- Rugged & Reliable
- Auto-Ranging
- Audible & Visual Alarms
- Easy Access to Data Files
- User-Settable Alarms



Part Number: 48-3833

Introduction

The Model ICS-4000 Radionuclide Identifier is a hand-held gamma-ray spectrometer that combines a multichannel analyzer with a high resolution cadmium telluride detector. It automatically analyzes gamma ray spectra and reports both detected radionuclides and dose rates. Time and radiation levels are logged for each alarm. An LCD backlight and large, tactile buttons allow easy operation even in dark or brightly lit areas or while wearing heavy gloves.

A Help menu is easily accessible from any screen. Onboard non-volatile flash memory provides storage for 300+ spectra. Data files, including measurement conditions, identified isotopes, dose rate, and integration time can be uploaded automatically to a PC using the ICS Explorer software. This instrument is housed in a durable aluminum enclosure to withstand rigorous field use. Free software upgrades for the life of the instrument are included.

Specifications

INDICATED USE: radionuclide identification and analysis

DETECTOR TYPE: cadmium telluride (CdTe); 10 x 10 x 1 mm CdTe

ENERGY RANGE: 10 keV to 2 MeV

CHANNELS / ACQUISITION: 4000 max, 2000 effective channels

IDENTIFICATION RANGE: 50 μ R/hr to 1 R/hr

RESOLUTION: 1% at 662 keV

EFFICIENCY (4 π): 5% for 129 I; 5% for 57 Co; 11% for 133 Ba; 2% for 137 Cs

LINEARITY: +/- 1%

ACCURACY: +/-10% per ANSI 323A-1997

ENERGY RESPONSE: energy dependent

RATEMETER ALARM: user-adjustable

MASTER LIBRARY: 166 radionuclides (sublibraries Norm, Medical, Indust, SNM)

CUSTOM SUBLIBRARIES: up to 40 user-settable isotopes

DISPLAY UNITS (Autoranging): μ R/hr, mR/hr, R/hr, μ Sv/h, mSv/h, Sv/h, cpm, cps (User Settable)

POWER: 7.4 v rechargeable Li+ with built-in charger (AA battery module and/or AC adapter available)

BATTERY

- Capacity: 3.6 amp hours
- Measurement Time/Charge: approximately 24 hours
- Charge Time: approximately 5 hours

TEMPERATURE RANGE: 0 to 50 $^{\circ}$ C (32 to 122 $^{\circ}$ F)

SIZE: 25.9 x 8.6 x 3.0 cm (10.2 x 3.4 x 1.2 in.) (H x W x L)

WEIGHT: 0.80 kg (1.75 lb)

This product is available through **JRT** Associates 800-221-0111