

NuDET ENA

WIDE RANGE OF SODIUM IODIDE, LBC, CeBr₃ SCINTILLATOR PROBES



The NuDET ENA premium series of spectrometric gamma probes are designed for a wide range of applications including industry, early warning networks, environmental monitoring and nuclear site monitoring. The probes are capable of working in environments with ambient dose equivalent rates from 50nSv/h to 40 μSv/h (2" NaI(Tl) crystal), 50 nSv/h to 20 μSv/h (3" NaI(Tl) crystal), from 50nSv/h to 60 μSv/h (1.5" CeBr₃, 1.5" LBC). The range of probes can be connected directly to PC via USB cable or the Ethernet.

Benefits

- Integrated MCB3 multichannel analyzer
- Different types of crystals – NaI(Tl), LBC, CeBr₃
- Measurement of ambient dose equivalent rate
- Automatic recovery after power supply outage
- Spectrum stabilization
- Direct connection to PC via USB or ethernet

Key figures

40 keV - 3 MeV

➔ Energy range

50 nSv/hr - 40 μSv/hr

➔ Maximum H*(10) range for 2" NaI probe

IP67

➔ Ingress protection

Product Description

- NuDET NAI SBG.D.2.2.2 or NuDET NAI SBG.D3.3.3 2" or 3" NaI(Tl) scintillation crystal with PMT, LBC 1.5" or CeBr 3 1.5" or 2"
- NuNA MCB3 multi channel analyzer
- Auxiliary electronic components (connectors, power regulators etc.)
- Aluminum housing
- Optional meteorological station, and GPS module for cabinet

Control Software

- MS Windows XP/ 7 8 8 1 10 compatible
- Measurement of ambient dose rate equivalent rate
- Calculation of abundance of radionuclides in the spectrum
- Periodic storage of measured spectra
- Displaying current spectrum
- User customizable nuclide library
- Potential to display data from other sources, e.g meteorological data, temperature sensor, GPS mapping

Product Application

- Industrial applications
- Environmental monitoring
- Workplace monitoring

Product Specifications

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|------------------------------------|---|
| Power supply | 12 - 24 VDC 25% 1A |
| Interfaces | USB or RJ45 LAN (Ethernet) |
| Dimensions | Height 443 mm, diameter 110 mm |
| Temperature range | from 20 to +55 C |
| Ingress protection | IP67 |
| Detector resolution | < 6.8% (2" NaI probe) < 7.8% (3" NaI probe) < 3,1 % (1.5" LBC) < 4.1 % 1.5 " CeBr ₃ probe) |
| Detector stabilization | By gain shift controlled by position of 1460 keV line of K 40 |
| Energy range | 40 keV - 3 MeV |
| Maximum usable H*(10) range | 50 nSv /h 4 0 μ Sv /h (2" NaI) 50 nSv /h 20 μ Sv /h (3" NaI) 50 nSv /h 60 μSv/h (CeBr ₃ , LBC) |

