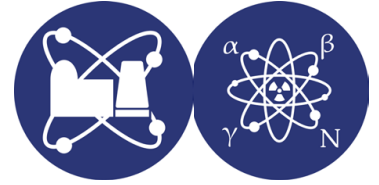


# NuDET NAI

SODIUM IODIDE SCINTILLATION  
DETECTORS AND PROBES



The NuDET NAI series offers a variety of NaI(Tl) scintillation detectors with standard shapes and dimensions. The integrally mounted scintillation assemblies are hermetically sealed units containing NaI(Tl) crystal optically coupled to a photomultiplier tube. The assemblies are designed for crystals up to 3 inches in a diameter. These probes excel with consistent, superior energy resolution and efficiency.

## BENEFITS

- In-house production → control over entire production process
- Advanced encapsulating techniques and photomultiplier selection help to improve the energy resolution and the long-term stability of the probes
- Integrally-mounted scintillation assemblies have many advantages such as permanent light sealing, ensuring photomultiplier hard adaptation and preventing accidental PMT damage

## KEY FIGURES

< 7%

Energy resolution for  
2×2" detector @ 662 keV

< 7.5%

Energy resolution for  
3×3" detector @ 662 keV

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## PRODUCT DESCRIPTION

Nal(Tl) detectors are available in three basic configurations:

- SBG Nal(Tl) scintillation detectors
- SBW well type Nal(Tl) scintillation detectors
- SNG Nal(Tl) scintillation probes

A complete SBG detector ended with PMT pins (standard 14-pin). Model SNG further comprising of integrated voltage divider and connector or cable interface (user selectable - MHV connector default) or separate signal (BNC) and high voltage connector (SHV).



## PRODUCT SPECIFICATIONS

	SBG.D2.2.2	SBG.D3.3.3	SNG.D2.2.2C/D
Detector	Integrally-mounted scintillation assembly with Nal(Tl) Scintillation Detector	Integrally-mounted scintillation assembly with Nal(Tl) Scintillation Detector	Nal(Tl) Scintillation Probe - Integrally-mounted scintillation assembly with Nal(Tl) 2" x 2" crystal and 2" photomultiplier tube for high sensitivity applications, includes voltage divider
Crystal size	2" x 2"	3" x 3"	2" x 2"
Resolution	< 7% @ 662 keV	< 7.5% @ 662 keV	< 7% @ 662 keV
Interface/socket	PMT pins (standard 14-pin plug)	PMT pins (standard 14-pin plug)	Connector or cable interface (user selectable) - MHV connector default - C/separate signal (BNC) and high-voltage connector (SHV) - D
Dimensions (ø x l)	59 x 175 mm (without PMT 14 pin plug app 23 mm)	86 mm (end-cap), 90 mm (flange), 65 x 218 mm (PMT housing without PMT 14 pin plug app 22 mm)	56 mm (end-cap), 65 x 278 mm (flange and housing without plug), rugged, aluminium bodied

## PRODUCT APPLICATION

- Gamma ray spectroscopy
- Radioisotope assay
- Radon canister counting
- Thyroid uptake measurement
- Health physics application
- Radiation detection



## OPTIONS AND ACCESSORIES

- Thin aluminium radiation entrance window
- Mechanic adjustments (special flanges, mounting fixtures or other adjustments and modifications)
- Electronic (Integrated low-background voltage divider and related or end user specified electronic and connectors or pre-installed cables with open ends)