

# High Sensitivity Ultra-compact Thermal Neutron Scintillation Detector

The TN15™ high sensitivity thermal neutron detector utilizes a state-of-the-art Silicon photomultiplier (SiPM) and offers world-leading specification in a compact form. The TN15™ surpasses the performance of a 100mm long 13mm <sup>3</sup>He tube at 4 atmospheres.

This highly compact device is completely self-contained, with a built-in preamplifier, shaping amplifier, pulse discrimination, and HV supply. The digitized neutron data is sent to a PC via the mini-USB which also powers the unit, so no external power supply is required.

The TN15™ comes with K-Spect™, Kromek's entry-level Windows 10-based software\*, built for detailed sample and spectral analysis. K-Spect™ provides the spectrum acquisition, display, analysis, and storage functions.

The software can be upgraded to Kromek's top-of-the-range MultiSpect Analysis™ software, a unique application that allows connection of multiple detectors to a PC, and has the ability

to display multiple spectra; both live and saved, from previous measurements.

In addition to providing the spectrum acquisition, display and storage functions, MultiSpect Analysis™ allows the export of data for further analysis as well as matching spectra to a pre-loaded library of over 400 radionuclides.

*\*K-Spect™ is available to download, free of charge, via the Kromek website.*



## Main Features:

- High efficiency
- Excellent gamma rejection
- Compact
- Simple to use
- USB Powered
- Low power consumption

## Specifications:

Equivalent to 100mm x 13mm Ø <sup>3</sup> He at 4 atmospheres	
Photo-sensor	SiPM array
Thermal Neutron Sensitivity	>50%
Gamma rejection	Better than 10 <sup>-7</sup> at dose rates up to 10 mR/h with Cs137
Maximum throughput	10,000 cps
Power consumption	250 mW
Dimensions	131mm x 33mm x 24mm
Weight	110 gram
Temperature range	-10 to 40°C

## Kromek Group plc

UK NETPark Thomas Wright Way Sedgefield County Durham TS21 3FD | +44 (0) 1740 626060

USA 143 Zehner School Road Zelenople PA 16063 | +1 724 352 5288

[sales@kromek.com](mailto:sales@kromek.com) | [www.kromek.com](http://www.kromek.com)