

# Sahara - SD Detector

The ideal system for applications where LN<sub>2</sub> may not be practical

PGT has integrated the new Sahara Silicon Drift

Detector technology into a versatile

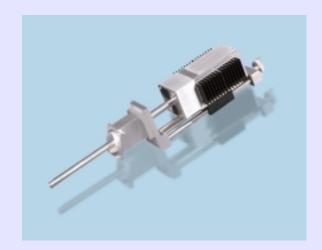
X-ray spectrometer

Princeton Gamma-Tech introduces Sahara SD Detector a high rate solid-state X-ray spectrometer with excellent energy resolution and no LN<sub>2</sub> or moving parts.

### EDS XRF

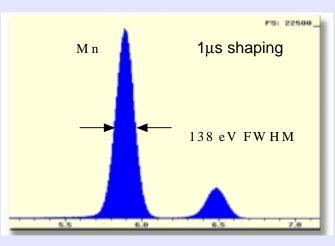
### Ultra High Count Rate X-ray Spectroscopy

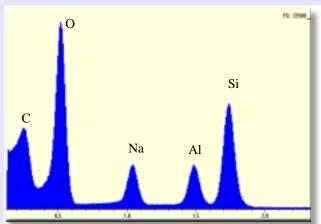
The Silicon Drift Detector (SDD) has recently become the detector of choice for X-ray applications requiring excellent resolution, high count rate capability and low energy sensitivity. This revolutionary technology, when optimized and integrated with state of the art PGT electronics and software yields the optimum solution for many EDS and XRF applications.



The low capacitance of the SDD coupled with recent advances in spectroscopy system electronics by PGT, have already yielded the following repeatable results:

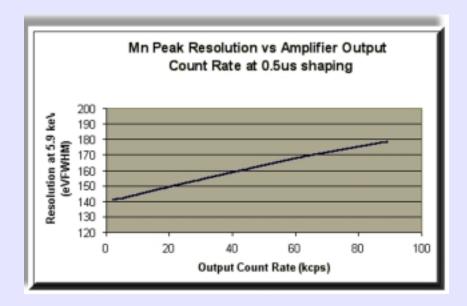
# Excellent Peak Shape and Resolution





# Low Energy Performance

#### Count Rate Performance



The inherent properties of the Sahara SD Detector allow for the use of shorter shaping time constants and therefore higher data throughput with minimal change in resolution.

#### Experience the convenience and capabilities of:

- Liquid Nitrogen free operation.
- Peltier cooling/automatic temperature control within one degree Celsius independent of room temperature for the ultimate in detector stability.
- Rapid cool down time (within seconds not hours)
- Low energy sensitivity; including Carbon
- Ultra high count rate performance
- User selectable time constants allowing optimization of resolution/count rate performance

### From detection to analysis-

Convenience coupled with excellent quantitative and qualitative results are now available to you!

Contact PGT at and select from a variety of system configurations that best meet your needs

Since 1965 PGT has developed detectors for use in applications from the laboratory to missions in space. Today, the innovation continues. PGT offers the broadest of choices in detector technology.

- Sahara SDD with no LN<sub>2</sub>, or moving parts, and ultra high count rate performance with excellent energy resolution.
- High-Purity Germanium (HPGe) planar detectors for the ultimate in high energy efficiency and low energy resolution.
- Large area detectors for maximum throughput, especially at low voltage or low vacuum in microscopy applications.
- JT Cool for traditional Si(Li) and HPGe detectors where Liquid Nitrogen is not practical.
- The Quiet One "microphonics reduction technology" for acoustically and mechanically harsh environments.

The choice is yours!

