

## Ceramic Coated NPD Ion Sources from DET

(new prices effective 1 December 2009)

DET ion sources are compatible with the Agilent 6890/7890 NPD, as well as DET NPD/TID hardware retrofits for Thermo, Varian, SRI Instruments, and HP 5890 GC models.

### **BEST PERFORMANCE - 2 NPD CERAMIC COATINGS ARE AVAILABLE:**

**TID-2 (Black Ceramic)** - for applications requiring P or both P and N detection (e.g., pesticides); **P DETECTIVITY = 70 fg P/sec** with **MINIMAL PEAK TAILING**;

**TID-4 (White Ceramic)** - for applications requiring only N detection (e.g., drugs); this is our best N response - **N DETECTIVITY = 70 fg N/sec**.

### **LOWEST COST: new source , recycled\* source**

**\*recycling** - return depleted sources to DET; we can salvage the electrical connector and Aluminum connector holder and attach them to new source wiring with a new TID-2, TID-4, or any other DET ceramic coating; recycled sources are tested for performance comparable to a new source, and are available at a lower cost.

**compare DET prices vs. other type NP ion sources** - Agilent "Blos" glass (susceptible to melting), ; Agilent white ceramic (reportedly now sensitive to ambient moisture), \$415; Varian ceramic (badly tailing Phosphorus peaks),  
**(why pay more for less quality?)**

### **HIGHEST QUALITY (30 years experience in ceramic ion source technology):**

- unlike glass NPD beads, DET ceramics are robust rigid structures that will not soften or melt at the 600- 800°C temperatures required for NP detection, and are tolerant of a wide variety of operating conditions;
- DET ceramics have long operating life, and unlimited shelf life with no special requirement for protection from ambient moisture.
- DET ion sources are backed by operating/troubleshooting advice from the leading experts in NP detection.

**VISA, MASTER CARD,**

cards accepted.

Contact DET for advice on simple conversions from NPD to other modes of thermionic ionization detection such as selectivity to **Nitro compounds, Oxygenates, Halogenates, CH<sub>2</sub> functional groups**, and other compounds.