

## **Features**

**For instruments:** Thermo/Finnigan GCQ™, Thermo/Finnigan LCQ™, Thermo/Finnigan LTQ™, Thermo/Finnigan SSQ®/TSQ® 7000, Thermo/Finnigan PolarisQ, Thermo/Finnigan TSQ® Quantum

- Easy Replacement
- Extended Linearity
- Low Noise
- Lower Cost
- Longer Life
- Greater Sensitivity
- High Performance
- Compact, On Axis Design
- Wide Dynamic Range
- Excellent Pulse Height Resolution

The Photonis Channeltron Mass Spec Detectors deliver high performance and are the preferred detector for mass spectrometers. A 100% test and inspection policy guarantees customers the highest quality and most reliable mass spectrometer detectors.

## **Description**

**For instruments:** Thermo/Finnigan GCQ™, Thermo/Finnigan LCQ™, Thermo/Finnigan LTQ™, Thermo/Finnigan SSQ®/TSQ® 7000, Thermo/Finnigan PolarisQ, Thermo/Finnigan TSQ® Quantum

Photonis' MAGNUM™ ELECTRON MULTIPLIER provides exceptional performance to achieve optimum mass resolution, dynamic range, and detection sensitivity for Mass Spectrometry measurements.

The sensitivity of the instrument is often limited by the detector. Benefiting from our exclusive SPIRALTRON™ technology, Photonis' MAGNUM™ Mass Spectrometer detector provides the highest dynamic range in the industry, as well as delivering increased gain stability and extremely low noise. The SPIRALTRON™ technology incorporates six individual spiral multiplier channels, fed by a single integral ion collection aperture. The high degree of channel curvature ensures that ion feedback noise is virtually eliminated.

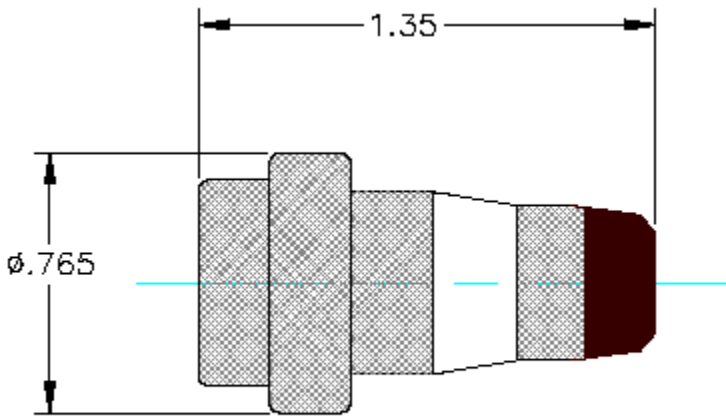
Distributing the secondary electron generation over six separate multiplier channels increases linear output current and promotes longer detector life. Single piece construction eliminates fastener and connection problems, and Photonis' proprietary glass formulation provides the industry's longest detector life. Photonis' replaceable MAGNUM™ cartridge can be installed quickly with minimal instrument down time. Installation can be performed by the instrument operator eliminating the need for an expensive factory service call. Each cartridge is specifically designed to be an exact replacement for the original detector cartridge. It is not necessary to purchase an ion optics frame to replace the detector cartridge.

High mass resolution, dynamic range improvements, and superior sensitivity, all from the world's largest supplier of standard, retrofit and custom detectors for mass spectrometry.

**Specs**

<b>SPECIFICATIONS</b>	
Operating Voltage	1000 - 3000 VDC
Gain (typical)	$1 \times 10^7$ at 2500 V
Background Noise (typical value after degassing)	$< 2 \times 10^{-13}$ A at 3000 V
Output Dark Pulses (typical value after degassing)	$< 0.1$ cps at 3000 V
Resistance	16 - 42 M $\Omega$ at room temperature
Linear Output Current (min.)	20 $\mu$ A
Operating Temperature Range	-50° to +100 °C
Maximum Vacuum Bake Temperature (non operating)	380 °C
Operating Pressure (max.)	$7 \times 10^{-4}$ torr

Detector Configuration (inch)



CONE I.D = 0.52

The 5903 MAGNUM ELECTRON MULTIPLIER. is a direct replacement for the original detector.