

Features

For instruments: Agilent 5970/A/B MSD, 5971/A MSD, 5972/A MSD, 5973/A/N MSD, 5975 (without TAD), 5989/A/B (MS Engine), 5992/A/B, 5993/B, 5995, GCD, 1100 LC-MSD

- 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: Agilent 5970/A/B MSD, 5971/A MSD, 5972/A MSD, 5973/A/N MSD, 5975 (without TAD), 5989/A/B (MS Engine), 5992/A/B, 5993/B, 5995, GCD, 1100 LC-MSD

OEM #: 05971-80103 1970-0075 05989-80002 05971-80101 05971-80102

Notes: Multiplier horn only (no frame).

The Photonis Magnum Electron Multiplier™ has exceptional performance to achieve optimum mass resolution, dynamic range, and detection sensitivity for Mass Spectrometry measurements.

The sensitivity of your 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 the minimum of instrument down time. Installation can be performed by any 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. You don't have to buy 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.

5975 Users

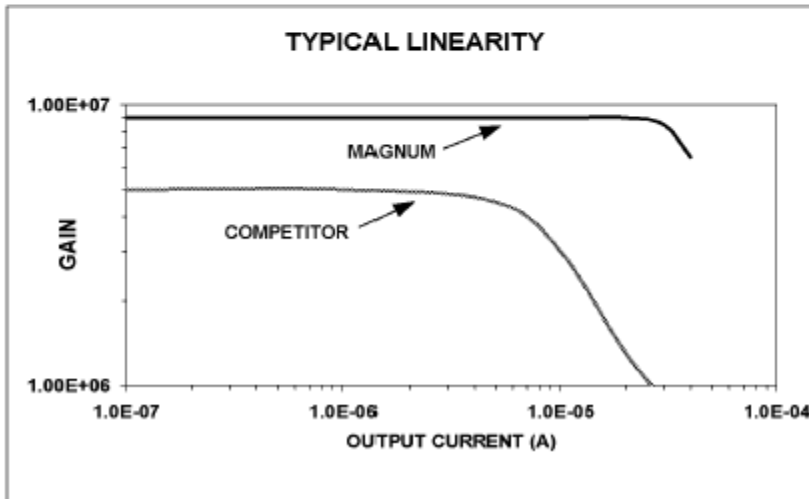
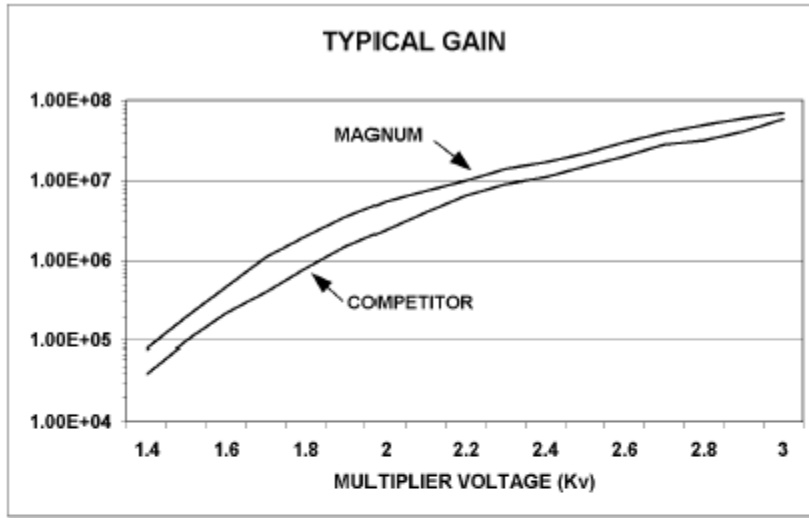
Important selection notes for 5975 users: Please check whether your Agilent 5975 MS has a "triple axis detector" (TAD) configuration.

TAD instruments use the #G3170-80103 or equivalent replacement multiplier, such as the [Detech 2800](#). The 5975C inert XL and 5975E generally use a TAD, but some older models may be upgraded to the TAD with the TAD upgrade kit (#G3392A).

Older (non-TAD) instruments can use the Agilent/ITT [#05971-80103](#) or equivalent replacement multiplier, such as the [Detech 2300](#) or [Photonis 5900](#) (which are drop-in replacements) or [ETP AF617](#) (which includes a new frame mount and "discrete dynode" style AF616 multiplier, also known as Agilent #G3170-80200/#G3170-80203).

[Click here to go to main 5975 Multiplier page.](#)

Specs



SPECIFICATIONS

Operating Voltage	1200 - 3000 VDC
Gain (typical)	5×10^5 @ 1.6kV, 8×10^6 @ 2.3kV, 6×10^7 @ 3.0kV
Background Noise (typical value after degassing)	$< 3 \times 10^{-13}$ amps @ 3000V
Output Dark Pulses (typical value after degassing)	< 0.1 count/sec @ 3000V
Resistance	20 - 40 M Ω @ room temperature
Linear Output Current	20 micro-amps min
Operating Temperature Range	-50° to +100 °C
Maximum Vacuum Bake Temperature (non operating)	380 °C
Vacuum	7×10^{-4} torr max. pressure

Detector Configuration



The Magnum Electron Multiplier is a direct replacement for the original