

5900 MAGNUM ELECTRON MULTIPLIER™

For HP 5770A, 5970, 5970B,
5971A, 5972A, GCD, 5973,
5989A, 5989B, M.S. Engine,
and 5995 Mass Spectrometers

- High Performance
- Linear Over Wide Range of Output Current
- Low Noise
- Direct Plug-in Replacement for OEM Multiplier

The BURLE **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, BURLE's **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.

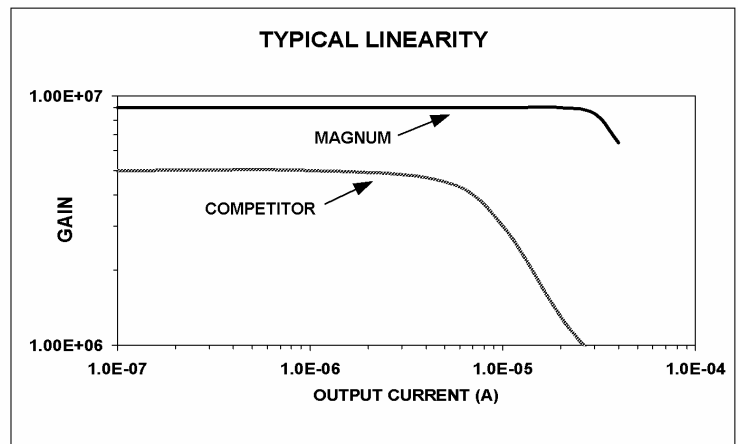
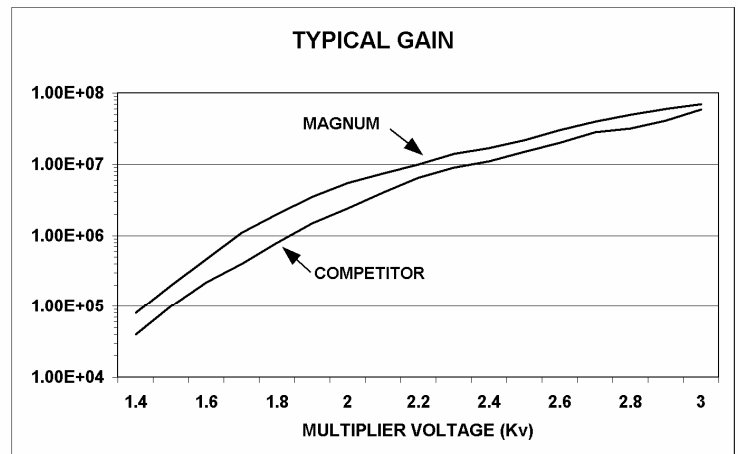
Distributing the secondary electron generation over six separate multiplier channels increases linear output current and promotes longer detector life. Single piece construction eliminates fastener and connection problems, and BURLE's proprietary glass formulation provides the industry's longest detector life.

BURLE's 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.

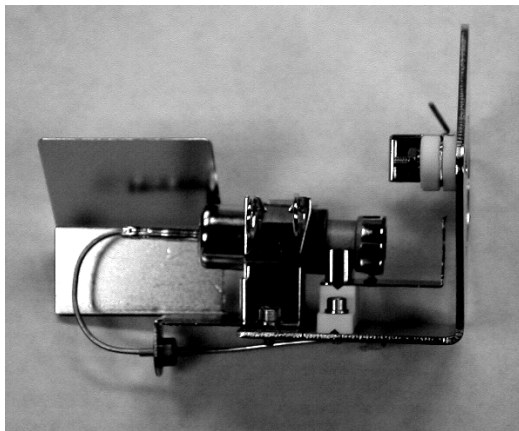
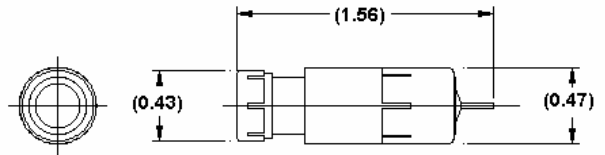
High mass resolution, dynamic range improvements, and superior sensitivity, all from the world's largest supplier of standard, retrofit and custom detectors for mass spectrometry.



MAGNUM ELECTRON MULTIPLIER™

SPECIFICATIONS	
Operating Voltage	1200 – 3000 VDC
Gain (typical)	5X10 ⁵ @ 1.6kV, 8x10 ⁶ @ 2.3kV, 6x10 ⁷ @ 3.0kV
Background Noise (typical value after degassing)	<3x10 ⁻¹³ amps @3000V
Output Dark Pulses (typical value after degassing)	<0.1 count/sec @3000V
Resistance	20 – 40 MΩ @ 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	7x10 ⁻⁴ torr max. pressure

DETECTOR CONFIGURATION



The Magnum Electron Multiplier™ is a direct replacement for the original

Features

- Easy Replacement
- High Dynamic Range
- Extended Linearity
- Low Noise
- Lower Cost
- Longer Life
- Greater Sensitivity

The information furnished is believed to be accurate and reliable, but is not guaranteed and is subject to change without notice. No liability is assumed by BURLE INDUSTRIES for its use. Performance data represents typical characteristics and not specifications as actual, individual product performance may vary. Customers should verify that they have the most current BURLE product information before placing orders, and should independently test and evaluate BURLE products for their intended use. No claims or warranties are made as to the application of BURLE products or their suitability or fitness for any particular purpose. This document may not be reproduced, in whole or in part, without the prior written consent of BURLE INDUSTRIES.

Copyright 2004 by BURLE Technologies, Inc. All rights reserved.

Magnum Electron Multiplier™ and **SPIRALTRON™** are trademarks of BURLE Technologies, Inc. All other trademarks are the property of their respective owners. BURLE® and BURLE INDUSTRIES® are registered trademarks of BURLE Technologies, Inc. Marca(s) Registrada(s). Printed in the U.S.A.

For additional information in the U.S.A. and Canada, telephone +1-800-648-1800 and for international calls, use +1-508-347-4000, or FAX request to +1-508-347-3849. BURLE Electro-Optics, Inc., Sturbridge Business Park, P.O. Box 1159, Sturbridge, MA 01566-1159 USA