

# ACTIVE FILM Multiplier™

## Varian Saturn 2000 ion-trap GC-MS

The **ACTIVE FILM Multipliers™** for the Varian Saturn 2000 ion-trap mass spectrometer is specifically designed for this instrument. It is a direct "plug-in" replacement electron multiplier and is fully compatible with Varian hardware and "Multiplier Setup" software.

**ACTIVE FILM Multipliers™** are a new development in multiplier technology that incorporate totally air-stable "ACTIVE FILM" materials into a discrete-dynode multiplier design to produce an exceptionally sensitive ion detector with long operating life and excellent air stability.

### ELECTRON MULTIPLIER FOR VARIAN SATURN 2000



- "Plug-in" Compatible
- High Sensitivity
- Low Noise
- High Gain
- Long Life
- Stable in air

**ETP** electron multipliers

#### ETP Electron Multipliers

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**ACTIVE FILM Multipliers™** give a combination of performance and durability unsurpassed by any other type of electron multiplier detector.

**ACTIVE FILM Multipliers™** have higher gain than alternative multipliers resulting in consistently lower multiplier voltages. Their long operating lifetime means less frequent multiplier replacement and reduced instrument down-time.

### ACTIVE FILM MULTIPLIERS™

Arrive ready to install in your Varian Saturn 2000 ion-trap mass spectrometer.

### ACTIVE FILM TECHNOLOGY

**ACTIVE FILM Multipliers™** are a new type of electron multiplier detector for mass spectrometry and represent the latest development in electron multiplier technology.

**ACTIVE FILM Multipliers™** combine the wide dynamic range and longevity of discrete-dynode multipliers, with the compact size and air stability of continuous-dynode multipliers.

### SPECIFICATIONS

### PART NO. 14147

|   |                   |
|---|-------------------|
| Replacement multiplier for Varian Mass Spectrometer model number: | Saturn 2000 GC-MS |
| Typical voltage to achieve 1x10 <sup>5</sup> gain                 | 1.35 kV           |
| Maximum Dark Current at 2.5kV                                     | <1 picoamp        |
| Maximum bake-out temperature in vacuum                            | 350°C             |
| Number of dynodes   | 15                |
| Total internal resistance (HV lead to ground)                     | 22.8 M            |