

Installation Notes

Model 14820 ACTIVE FILM Multiplier

The 14820 ACTIVE FILM Multipliers have a side entry input aperture and a flat ion impact surface (first dynode). The ion impact surface is parallel to the plane of both the aperture mesh and the mounting bracket.

The multiplier should be mounted so that all of its metal components (excluding the mounting plate which is normally attached to a grounded surface) are at least 4mm from any external metal surface.

There are 3 electrical connections to the multiplier: I) -HV, II) +HV and III) the signal output lead.

ADDITIONAL NOTES FOR HIGH CURRENT "H" OPTION MODELS

1. The high voltage power supply used in conjunction with a high current "H" option ACTIVE FILM Multipliers must be capable of delivering 1 to 1.5 mA of current to supply the multiplier's relatively low internal resistance (3.36 M between -HV and +HV).
2. An "H" option multiplier dissipates several watts of power, so a thermally conductive path must be maintained between the multiplier's mounting and the chamber walls.
3. To avoid noise due to out-gassing of absorbed water vapour, it is recommended that "H" option multipliers be exposed to vacuum for 16 hours before initial operation and the applied high voltage kept below 2kV for the initial two hours of operation after exposure to air.

MODEL 14820

