HIGH ENERGY ACCELERATOR AREA MONITOR
PLASMA CHAMBER®
Model – TBM-IC-ACC

FEATURES:
- BETA, GAMMA, X-RAY, POSITRONS, PROTONS
- MEETS AND EXCEEDS 100 R/h (other ranges available)
- DIGITAL READOUT: 6 digit-rate, DOSE RATE
- WALL MOUNT BRACKET
- FLAT RESPONSE - SEALED PLASMA CHAMBER®
- FAST RESPONSE
- ALARMS: AUDIO / VISUAL
- AC OPERATION / BATTERY BACK UP

APPLICATION:
Use in Accelerator & Linac facilities for high energy density from High MeV Gammas and from Nano Second Pulsed X-Rays / Photons.

PHOTON PLASMA DETECTOR FOR MEDICAL, INDUSTRIAL, & GOVERNMENT ACCELERATORS WITH X-RAYS OR GAMMAS OVER 2 MeV ENERGY.

WHY IS THIS CAPABILITY NEEDED?
- The nanosecond pulsed X-Rays & the 2 MeV and higher X-Rays and Gammas have so much energy that they create a small volume of dense plasma inside the ion chamber. The plasma quickly collapses and disappears & the energy turns into minor heat and turbulence.
- The TBM-IC-ACC is able to accurately collect and display the amount of energy in the plasma before it collapses. Other brands and models do not.

RESPONSE:
TBM-IC-ACC is the ONLY accelerator plasma chamber® that will detect nanosecond pulsed X-Rays. It will accurately measure the integrated Total Dose from pulsed X-Ray machines over a wide range of pulse widths & repetition rates.
DESCRIPTION:
The TBM-IC-ACC consists of a plasma chamber coupled to a Digital display that reads out directly in mR/h or total mR.

SPECIFICATIONS:
PULSED X-RAY RESPONSE
Total Dose: 1 mR to 100 R in a single range (8 digits)
Dose Rate Range: 1 mR/hr to 10,000 mR/hr (6 digits) or 10 mR/h to 100,000 mR/h
Pulse Width Range: 20 nano-seconds to continuous emission
Repetition Rates: Single pulse to 1000/second
Wide Energy Range: 2 KeV to 10 MeV
High Dose Limits: Per customer specification*

User should inform TA of highest-expected: 10-second, total-dose exposure
*Note: TA also makes TBM ion chambers that measure up to 10 million R/hr

Detector: Sealed Plasma chamber
Cap: Removable protective cap
Window: 0.5 mg/cm² Kapton.
Readout: LCD 8 digits with capacity backlight
Count Lamp: Green Flashing LED
Over-Range: Red LED Indicator
Audio Alarm: User settable anywhere within TBM range
Battery Back Up: NEDA 15A, 6 ea. (AA)– 200 hour life with typical use.
Dimensions: 5-1/2” x 3-1/2” x 8” including handle.
Weight: 2.9 lbs. complete with batteries.
Options:
Other Rate or Integrated Ranges
Other Readout Units such as Si units: Sv and Sv/h.