Long term reputation in the medical industry.

Assurance we will offer competitive pricing.

Customer service #1 priority.

One Stop.

LACO Inc.

can do it all!

VeriDose® Solid-State Diode Detectors

Introduction

Using the VeriDose Patient Dose Monitor Quality Control (PDMQC) System or the VeriDose V Patient Dose Monitor in conjunction with VeriDose Solid-State Diode Detectors, you can verify the given dose quickly and accurately during treatment, thus avoiding potential misadministration of radiation.

Applications

VeriDose Solid-State Diode Detectors are solid-state silicon-based radiation detectors that utilize a p-n junction. These rugged diodes are encased within a biocompatible polystyrene material. A low noise coaxial cable is used to connect the diode to an electrometer. When attached to an electrometer, these diodes provide enhanced sensitivity and instantaneous response time.

- Designed to provide superior response, reliability, and performance
- Long-lifetime diodes. Tested to 2 x 106 cGy in a high-energy electron beam, the most damaging radiation
- Very low dose rate and temperature dependence
- Hemispherical shape improves isotropic response and reduces angular and field-size dependencies

Features

- Waterproof design with appropriate buildup for all clinical photon and electron energies
- Flat bottom permits secure, easy placement on the patient
- Color-coded for ease of identification
- Dose rate independent
- Responds to photons and electrons
- Responds to dose rates of 1.0 to 1000 cGy/min
- Can be used on continuous (^{60}Co) x-ray beams, pulsed (linear-accelerator) x-ray beams, and electron beams
- Optimized for use with all Nuclear Associates' Patient Dose Monitors and high-quality medical-grade ionization chamber electrometers
- All diodes are supplied with a non-crimp repairable cable with a coax BNC connector

Specifications

Photon and electron diode detectors

Nominal sensitivity 1.5 nC/cGy
Sensitivity volume 0.25 mm^3
Output polarity Positive/Negative
Linearity < 0.1% for dose ranges from 0.01 to 10 Gy; < 0.1% for dose rates 3 to 5 Gy/min
Reproducibility 0.2%
Angular dependence
< 2% ± 60° for lower energy diodes (Models 30-471 & 30-472); < 2% ± 10°; < 5% ± 60° (for higher energy photon diodes and electron diodes)
Sensitivity loss at 10 kGy < 15%
Cable length 10 ft (3 m)
Dimensions 8 mm Ø
Weight 42 gm
Optional accessories
Diode Extension Cable, 30 ft (9 m) (Model 88-490)
Diode Extension Cable, 10 ft (3 m) (Model 88-490-1000)

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