About FLEXDos™

FLEXDos™ is a revolutionary tool for detection of accelerator beam in real-time during treatment. The flexibility aspect of FLEXDos™ allows it to conform to complex bodily structures.

Ease of Use

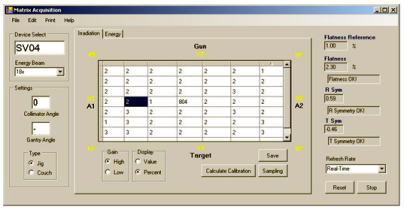
FLEXDos™ can be custom tailored to conform to many body structures such as head, breast, and chest. Based on thin film technology, FLEXDos™ can be as thin as <0.2mm. All the detector signals are integrated using corresponding electrometers, and are then multiplexed, digitized and stored onto a computer.

Software

A data collection and analysis software that works seamlessly with the hardware is included with the system. Information such as beam flatness, symmetry, dose in absolute value and percentage difference from the centre detector can be displayed in real-time. 3-D plots and 2-D contour plots can be generated for an in-depth visual inspection of the beam profiles. Horizontal, vertical, diagonal cross sections of the beam field can be plotted for comparison and verification purposes.

Applications

In some deliveries of radiation therapy, the patient's skin dose is often monitored. Sparing the skin effectively in radiation therapy can avoid complications such as skin reddening and fibrosis in the breast treatment, and therefore enhance the patient's quality of life. Radiation dosimeter used in the measurement should be small, accurate, reliable and easy to set up. In particular, the dosimeter should be flexible to fit into the patient's surface contour with curvature. A wireless small solid-state dosimeter or dosimeter array, which can be bended/curved for the patient's surface contour, is desirable in the current real-time skin dose monitoring.



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