Area Gamma Monitor

Model: 7048

Application

Tyne's Area Gamma Monitor is a system to continuously measure & monitor gamma radiation at designated locations providing alarm control, self calibration, and data logging functions. It provides local audible and visual alarms as well as control and logging from a central computer.

The system meets stringent nuclear qualification requirements such as radiation high dose, temperature, humidity, EMC/EMI, as well as Category III software.

Specifications

Detector	Dual Ion chamber. LND501 and LND50343 to cover range 0.1mR/Hr to 100R/Hr. Compared with GM tubes, which have 5x10^10 counts limit, the Ion chambers have a much longer life and higher reliability.
Detector circuit	The radiation dose test detector signal will transmit to measurement unit via balanced-line transmission.
Check source	Check source with motor drive mechanism. 10uCi Cs137 is built into each detector box. A motor moves the check source close to the detector to check the response/calibration of detector.
Measuring Module	NIM double width module, built using a real-time micro-controller.
Alarm Module	NIM signal width module will provide all the relay and local audible & visible alarm.
Remote module	NEMA type 4 box module with alarm indication, audible alarm, exit sign. It communicates with measuring unit via RS485.
Central computer with Data trending, data logging.	Designed in VB.net.
Qualification	Radiation Dose for detector module Temp/Humidity: 50ºC/95%RH EMC/EMI Software qualification: Category III software