Moderator Sphere Neutron Area Monitor



300 mm polyethylene sphere for area monitoring of natural neutron radiation background using Albedo dosemeters

Features

- Suitable for area radiation monitoring
- Measures the neutron component of the annual background radiation in three months periods
- Uses the Albedo neutron dosemeters

The moderator sphere¹ is a passive dose equivalent meter for area monitoring of natural radiation background. It measures the neutron component of the natural annual background radiation of about 30 µSv. The monitoring period is at least 3 months. The passive neutron dose equivalent meter consists of a moderator polyethylene sphere of 300 mm diameter and a detector holder placed at a central position in the sphere. An Albedo dosemeter case with inserted TLD card is placed inside the detector holder for measurement. The user must specify the types of TLD card and Albedo dosemeter case.

In addition to the standard version of the moderator sphere, a waterproof version is available for use in the open air. A special support made of aluminum is used to set up the moderator sphere free in air at a certain distance from backscatter material.

Ordering Information

T860 Moderator sphere 300 mm T860/U901 Moderator sphere 300 mm, waterproof T8601 Albedo dosemeter case insert for moderator sphere

Option

T8602 Support for moderator sphere

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 $^{^{\}rm I}$ The moderator sphere has been developed in co-operation with the Research Center Karlsruhe, Germany