

# DIFFERENT... FROM THE FIRST SIGHT



STARLITE is the innovative NEUTRON MONITOR made by RAYLAB: designed for INDUSTRIAL, RESEARCH and MEDICAL environments.

A silicon-based system. It runs an embedded software able to optimize the neutron response at all energies.

# STARLITE REWRITES THE NEUTRON MONITORING AT ALL ENERGIES

## LIGHT AND COMPACT

4 kg easy to handle.

#### **ESSENTIAL**

Dosimetric values monitoring in real time with a history log for each measurement.

#### **STRONG**

Compact and bold design in a sleek black aluminum case.

### **ACCURATE**

Ambient dose response linear at all neutron energies.

#### SMART

Wi-Fi or ethernet controlled: no app or external software needed.

# FIELD DIRECTION

Real-time reconstruction of the main direction of the neutron field.

# ST.ARLITE



#### **USER EXPERIENCE**

#### ICRP-74 OR ICRU-95 STANDARD SELECTABLE

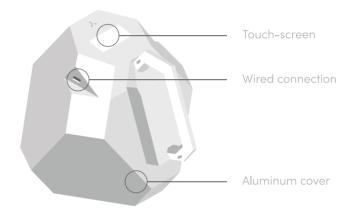
▶ Compliant with the new H\* ambient dose standard

#### **SMART AND STRONG DESIGN**

- ▶ Neutron field direction viewer
- ► Touch-screen display
- ▶ Wireless and wired connectivity
- ▶ Polyethylene moderator body with aluminum hard cover

#### FLEXIBILITY IN THE OUTPUT REPRESENTATION

▶ rem or Sv measurement unit selection



## **RELATIVE H\*(10) RESPONSE\*\***

IRRADIATION FIELD	DEVIATION
<sup>241</sup> Am–Be source at 1 meter	< 2%
<sup>252</sup> Cf source at 1 meter	< 2%
Moderated <sup>252</sup> Cf at 1 meter	< 12%
Thermal pile entrance position	< 10%

<sup>\*\*</sup>Assessed at the CMI primary neutron facility in Prague

#### ANGULAR RESPONSE OVER $4\pi$

IRRADIATION FIELD	VARIABILITY
Thermal neutrons	< 8%
Neutrons from <sup>241</sup> Am–Be source	< 4%

STARLITE can be provided, on request, with a calibration report or certificate

# **TECHNICAL DATA**

WEIGHT	4.0 kg (8.8 lb)
OVERALL DIMENSION	25 x 23 x 16 cm (10 x 9 x 6.3 inch)
NEUTRON ENERGY RANGE	Thermal to 20 MeV
MEASURING RANGE	10 nSv·h <sup>-1</sup> to 100 mSv·h <sup>-1</sup>
H* , H*(10) RESPONSE	0.3 cps per uSv·h <sup>-1</sup> ( <sup>241</sup> Am-Be)
γ-SENSITIVITY	< 1 uSv·h <sup>-1</sup> in 10 mSv·h <sup>-1</sup> , <sup>137</sup> Cs field
BATTERY LIFE	15 h (running)

#### STARLITE AT A GLANCE



- ► Touch-screen local interface
- ▶ Wi-Fi or ethernet remote User Interface
- Rate, integral, history log and direction on a clear view



- ▶ Simple and clear commands and outputs
- ▶ Internal data storage: easy to recall, tag and download
- ► Long-lasting battery operation (rechargeable)
- Monitor or cumulative operational mode