

RadEye Area Monitor for Gamma and Neutron Radiation Monitoring

The RadEye Area Monitor is based on Thermo Scientific's new RadEye family of personal radiation meters. The RadEye was developed in response to a growing need for smaller, more compact detectors which have even more sensitivity to unwelcome radioactive sources. The wall mounted RadEye Area Monitor extends the application range to convenient and cost-effective gamma and neutron area monitoring. In case of exceeding a preset threshold the system sets off an audible/optical alarm and the RadEye can be immediately used as a portable instrument.

- **Area Monitor and flexible handheld instrument in one**
- **No additional handheld instrument for source localization necessary**
- **In case of power failure the RadEye is still operational due to rechargeable batteries and built-in battery charger**
- **Simultaneous gamma and neutron monitoring with two RadEye Area Monitors**



1. Alarm Indication

Acoustical and optical alarm is indicated by the RadEye Area Monitor and the optional external alarm indicator.

Horn and bright flash light can be acknowledged even if radiation level is still elevated.



2. No need for an additional portable instrument!

Authorized staff takes the RadEye out of the box.

3. Localization of the radiation source



4. Re-insertion of the RadEye

The green light of the external indicator turns on once the RadEye is reinstalled in the box. Now the Area Monitor is ready for action again.

- Highly sensitive Area Monitor for wall mounting
- Removeable RadEye for localization of radiation sources
- Housing with power supply unit and battery recharger
- RadEye with rechargeable batteries for permanent operation
- RS232 interface for PC connection
- Socket for external alarm indicator with alarm acknowledgement

42506/80
Basic monitor incl. Power supply

Functions 42506/80	Lamp Red female con. 1 (Pin1)	Lamp Red female con. 1 (Pin4)
RadEye in the monitor		
Alarm	●	●
Low Battery	●	●
RadEye not in the monitor		

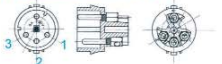


Topview (Bu.2)
D-Sub female connector 9 pin
RS232



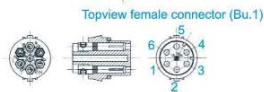
2 = RD
3 = TD
5 = GND

Topview male connector (Sl.1)



1 = +24V DC
3 = GND

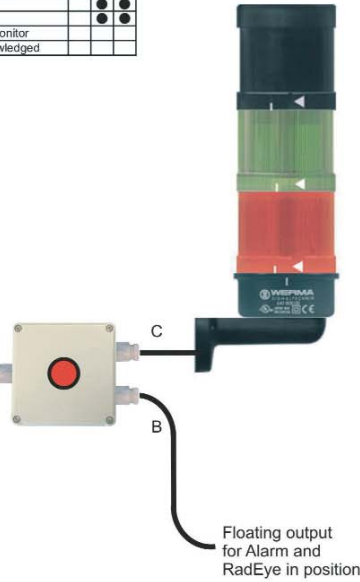
Power supply
100 - 230V AC
24V DC



1 = Alarm Out (+24V switched on)
2 = GND
3 = nc
4 = RadEye in position (+24V switched on)
5 = nc
6 = nc

42506/8010
Ext. Alarm unit + Alarm acknowledgment
incl. Cable

Functions 42506/8010	Lamp Green	Lamp Red	Horn
RadEye in the monitor	●		
Alarm		●	●
Low Battery			●
RadEye not in the monitor			
Active alarm, acknowledged			



Depending on the used RadEye type a competitive dose rate monitoring system can be achieved. The following applications are possible:

- Gamma dose rate measurement (RadEye G),
- Highly sensitive alarm indication for radioactive gamma sources (RadEye PRD)
- Detection of neutron sources (RadEye N)



The wall mounted Area Monitor can be completed with an external alarm unit with horn and beacon signalling and can be remotely acknowledged. The alarm unit can be placed up to a distance of 10 m (other lengths upon request) from the Area Monitor via cable.

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