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Telescopic Survey Meter

Specification sheet



**NUCLEAR
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Telescopic Survey Meter

The MER15 Telescopic Survey Meter is a wide range survey meter with a dose rate range from 0.01 $\mu\text{Sv/h}$ to 10 Sv/h capable of supporting a wide variety of external detectors.

The MER15 Telescopic Survey Meter can be used as a standalone instrument, or integrated into systems, using existing equipment and software. This telescopic survey meter features built-in data memory, data downloading capabilities, and an optional integrated transmitter for remote transmission of survey data.

The pole length has been improved to extend to 4 meters (13') and features a quarter lock positive mechanism.

The external detector, which contains two GM tubes also includes an external LED to light up and focus the area being surveyed.

The meter can be used as a standalone portable survey meter with a color display providing visual input in regard to the measured radiation levels from 0.1 $\mu\text{Sv/h}$ to 15 mSv/h (0.01 mR/h to 1.5 R/h).

Features

- Quick Connect Multi Detector options
- Color coded display featuring large easy to read digits
- Simultaneous display of external and internal detectors
- Simple multi-layered menu for quick selection of commands
- Integrated WRM2 communication
- Anodized aluminum 13' pole with 1/4 turn positive locking mechanism
- Built in LED on the tip of the detector to light up dark areas being surveyed
- Interchangeable "smart" detector capabilities
- Long battery life (100 hours)
- IP-67 rating available



The standard package includes the pole, meter and wide range gamma detector assembly (total price € 3510,00).



Detector Options

All the detectors mentioned below include the calibration factor and communication to the Meter via USB.

- Detectors may be switched and swapped instantly
- Detectors may be connected independently via standard USB cable to a PC
- Meter will automatically identify the detector
- All specifications are according to Caesium-137

Gamma wide range (WR)

Includes LED on the tip to survey dark areas



Radiation measured	Gamma, x-rays
Detector	ZP1201 and ZP1301 or equivalent
Dose rate range (Sv)	0.1 μ Sv/h to 10 Sv/h
Dose rate range (R)	0.01 mR/h to 1.000 R/h
Dose range	0.01 μ Sv/h to 999 Sv (0.01 mR to 999 R)
Sensitivity	17 cps/mR/h 0.3 cps/mR/h
Energy range	65 keV to 2 MeV
Protection	IP-67 rated

Gamma & Beta wide range



Radiation measured	Gamma, x-rays and beta
Detector	ZP1400 and ZP1301 or equivalent
Dose rate range (Sv)	0.1 μ Sv/h to 10 Sv/h
Dose rate range (R)	0.01 mR/h to 1.000 R/h
Dose range	0.01 μ Sv/h to 999 Sv (0.01 mR to 999 R)
Sensitivity	17 cps/mR/h 0.3 cps/mR/h
Energy range	65 keV to 2 MeV
Protection	IP-67 with protective cap attached

Gamma very high range (VHR)

Includes LED on the tip to survey dark areas



Radiation measured	Gamma, x-rays
Detector	ZP1201 and 4G60M or equivalent
Dose rate range (Sv)	0.1 μ Sv/h to 100 Sv/h
Dose rate range (R)	0.01 mR/h to 1.0000 R/h
Dose range	0.01 μ Sv/h to 999 Sv (0.01 mR to 999 R)
Sensitivity	17 cps/mR/h 60 cps/R/h
Energy range	65 keV to 2 MeV
Protection	IP-67 rated
Additional costs	€ 84,50 onto standard package price

Gamma highly sensitive (XDS)



Radiation measured	Gamma, x-rays and beta
Detector	CsI(Tl) crystal with silicon photomultiplier
Dose rate range (Sv)	Background to 500 μ Sv/h 55 kcps
Dose rate range (R)	Background to 50 mR/h 55 kcps
Dose range	0.01 μ Sv/h to 999 Sv (0.01 mR to 999 R)
Sensitivity	110 cps/ μ Sv/h
Energy range	50 keV to 1.7 MeV
Protection	IP-67 rated
Additional costs	€ 455,00 onto standard package price



Technical Specifications

Meter assembly

Detector	Energy compensated GM tube (ZP-1201 or equivalent)
Dose rate range (Sv)	0.1 μ Sv/h to 15 mSv/h
Dose rate range (R)	0.01 mR/h to 1.5 R/h
Linearity	\pm 10% of reading
Energy range	50 keV - 2 MeV
Energy response	Better than 20% for the whole energy range
Sensitivity (¹³⁷Cs)	17 cps/mR/h
Display	Color TFT display
Threshold alarms	User selectable for dose rate and accumulated dose
Battery life	100 hours of continuous operation (Four 1.5 Volt AA batteries)
Housing	Ruggedized plastic, IP-65 or IP-67 rated
Operating temperature	-20°C to +50°C
Humidity	Up to 93% at 35°C
Weight	440 grams (0.97 lbs)

Telescopic probe

Detectors	See previous page for available detectors for the MER15
Telescopic probe	Available in a number of lengths Anodized aluminum, quarter turn positive locking
Pole length	Collapsed: 120 cm (3' 11") Extended: 400 cm (13')
Meter bracket	Ruggedized bracket allowing quick release of the meter
Carrying strap	Included





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