



Gamma Probe 6150AD-18/Ex

Dose Rate Meter
6150AD5/Ex

Probe Cable
878.1.1

Battery Compartment Key 878.1.2

- Gets all the benefits from a modern microprocessor: Automatic range selection, smart time constant, digital calibration providing high accuracy
- Simultaneously measures current value, average value, and maximum value of dose rate, as well as accumulated dose (non-volatile dose memory provided)
- Alarm thresholds for both dose and dose rate including one freely programmable threshold each
- Automatic battery monitoring
- Robust waterproof aluminium die-cast housing
- EC-Type-Examination Certificate No. »PTB 04 ATEX 2004« issued by PTB (Physikalisch-Technische Bundesanstalt, German national bureau of standards)

6150AD5/Ex

Radiation Meter for Measuring the Ambient Dose Equivalent $H^*(10)$ of Photon Radiation (Gamma and X-radiation) approved for use in areas containing explosion hazards

6150AD® is our trademark (German registration number 303 55 582)

APPLICATION


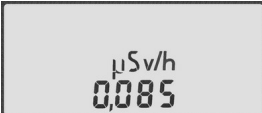
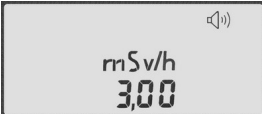
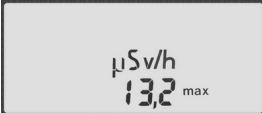

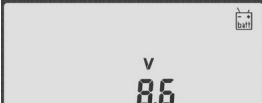
The 6150AD is a portable, battery operated dose rate meter to measure photon radiation (gamma and X-radiation). The device is a special version of our dose rate meter 6150AD with some modifications for use in areas containing explosion hazards.

Basic differences compared to the standard version are:

1. The serial interface is disabled.
2. The electrical drive for the buzzer is different. The buzzer's frequency is adjustable.
3. Display illumination uses LEDs as a light source (instead of an electroluminescence lamp which requires higher operating voltages).
4. Temperature range is restricted to -20 °C to + 40 °C.
5. The electronics are different and consume more power. This reduces battery life.
6. You need a special key to open the battery compartment.
7. The probe socket is a different type, thereby avoiding that normal probes of the 6150AD family can be connected.
8. The housing is made of waterproof aluminium die casting and has a blue powder-coating distinguishing it clearly from the standard 6150AD.

A built-in GM counting tube serves as the detector for dose rates ranging from approximately 0.2 mSv/h to 1 Sv/h. For low dose rate measurements the probe 6150AD-18/Ex is available as an **optional accessory**. The probe connects to the meter through a probe cable of up to 10 m length. The probe 6150AD-18/Ex has a larger counting tube which only covers dose rates up to 10 mSv/h, but which is better suited for low levels because of its higher sensitivity.

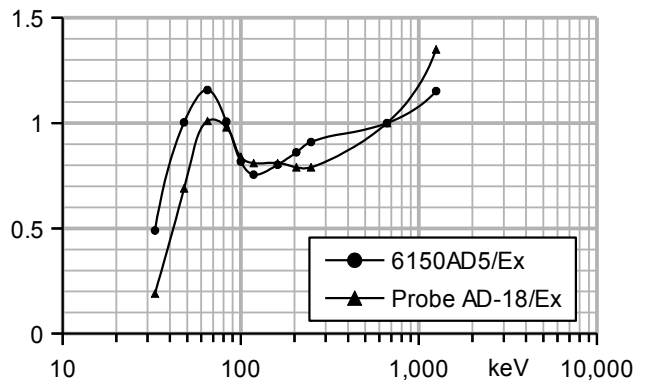
The most important functions are:

	Indication of the current dose rate in both analogue and digital form.
	Indication of the average dose rate. The average value can be cleared by a keystroke.
	Indication of the current dose rate alarm threshold. A different threshold can be chosen by a keystroke.
	Indication of the maximum dose rate. The maximum value can be cleared by a keystroke.
	Indication of the dose in digital and in analogue form as a fraction of the alarm threshold on an assumed scale from 0 to 100%.
	Indication of battery voltage. Automatic battery monitoring and battery warning.

Technical Data

	Basic Meter 6150AD5/Ex	Probe 6150AD-18/Ex
Detector (energy compensated)	GM tube ZP1310, effective length 16 mm, ~500 pulses per µSv	GM tube ZP1200, effective length 40 mm, ~5800 pulses per µSv
Measuring quantity	ambient dose equivalent H*(10)	
Energy range	45 keV - 3 MeV	65 keV - 1,3 MeV
Angular range	±45° around preferential direction	
Dependence on energy and angle	max. ±40% for all energies and angles within their specified ranges	
Analogue (A) and digital (D) range of dose rate indication	A: 1 µSv/h to 1000 mSv/h D: 0,0 µSv/h to 999 mSv/h	A: 0,1 µSv/h to 10 mSv/h D: 0,00 µSv/h to 9,99 mSv/h
Coefficient of variation of dose rate indication	lower than 15% lower than 5%	from 20 µSv/h on from 180 µSv/h on
Alarm thresholds	thresholds for both dose and dose rate including one freely programmable threshold each	
Representation of dose rate	simultaneously in analogue and digital form in the LCD of the 6150AD5/Ex, including indication of the unit	
Audible single pulse detection	yes, may be turned off with signal key	
Temperature range	-20°C to + 40°C, deviation max. ±10% referred to indication at +20°C	
Humidity	0 to 95% relative humidity	
Ambient pressure	60 to 130 kPa (600 to 1300 mbar)	
Power supply	9V battery	from 6150AD5/Ex via probe cable
Battery life with an alkaline battery:	illumination off illumination on	Including the 6150AD5/Ex: approx. 30 h approx. 12 h
Dimensions	height 130 mm, width 80 mm, depth 29 mm	diameter 30 mm, length 190 mm
Weight	approx. 400 g	approx. 245 g
Battery compartment key	type 878.1.2 (included)	
Required probe cable	type 878.1.1, length 1.25 m (not included), other lengths up to 10 m on request	

Energy response normalised to Cs-137



- SUBJECT TO CHANGE WITHOUT NOTICE -