



62AD25 / 62AD50

Universal radiation protection measuring device for measuring photon radiation (gamma and X-ray radiation) in the unit H*(10)

- Two device models: Measuring range 1µSv/h to 25 mSv/h or 1µSv/h to 50 mSv/h
- Automatic range switching, sliding time constant, digital calibration with high measurement accuracy
- Simultaneously operating functions: instantaneous value, average value and maximum value of the dose rate as well as cumulative dose (non-volatile dose memory), Archive
- Approx. 3000 operating hours with 9V alkaline battery
- Robust, waterproof aluminum housing (IP67)
- Serial RS232 interface for connection to probes, accessories and PC

TECHNICAL DATA

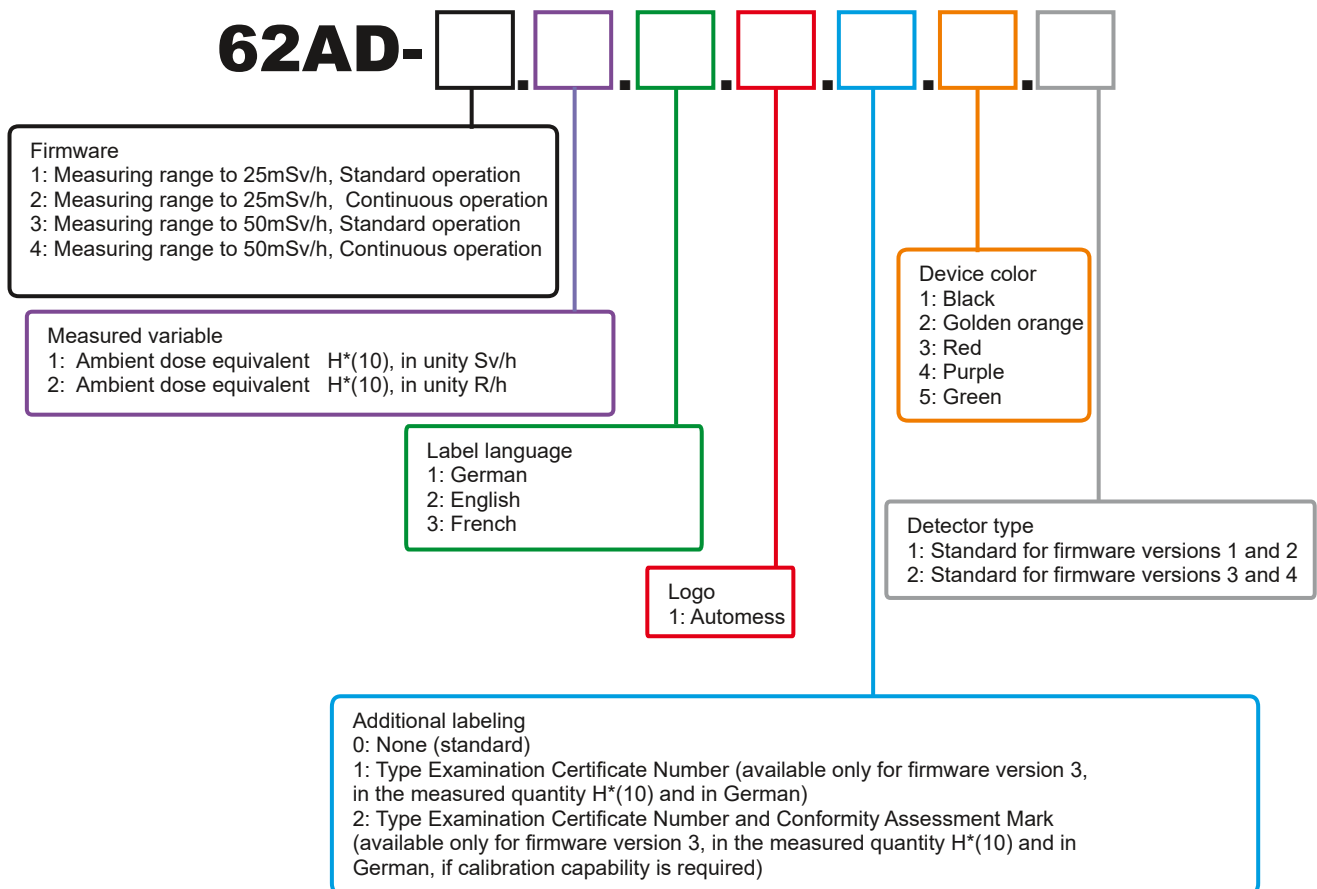
Note: Specifications marked with ^(PTB) are confirmed by PTB as part of the model 62AD50 type examination. "Permissible" deviations comply with PTB requirements and IEC 60846-1. Only compliance with these permissible deviations shall be deemed guaranteed.

Detector	62AD25: Gamma counter tube LND7121 or equivalent type, 62AD50: Gamma counter tube ZP1200 or equivalent type, Both types: effective length 40 mm, sensitivity at Cs-137 approx. 5800 pulses per µSv, lead-free energy compensation
Measured variable	Ambient dose equivalent $H^*(10)$
Nominal energy consumption range	65 keV to 1,3 MeV ^(PTB)
Nominal operating range of the beam incidence direction	$\pm 45^\circ$ ^(PTB)
Energy and anisotropy, deviation at any energies and directions within their nominal ranges of use related to Cs-137 in the preferred direction	62AD25: -25 %...+50 % 62AD50: -24 %...+48 % ^(PTB) (permissible: -29 %...+67 %) related to 662 keV (Cs-137)
Analog dose rate display range	0.1 µSv/h to 100 mSv/h
Digital dose rate display range	0.00 µSv/h to 25.0/50.0 mSv/h (62AD25/62AD50)
Dose rate measuring range	"fast" 62AD (conforms to IEC 60846-1): 5 µSv/h to 25/50 mSv/h ^(PTB) (62AD25/62AD50), Response time Time constant 4 s, Coefficient of variation Coefficient of variation < 5 % at ≥ 55 µSv/h
Dose rate measuring range	"slow" 62AD: 1 µSv/h to 25/50 mSv/h ^(PTB) (62AD25/62AD50), Response time Time constant floating 20 s to 4 s, Coefficient of variation Coefficient of variation < 5 % at ≥ 11 µSv/h
Apparative zero effect	< 50 nSv/h
Linearity of the dose and dose rate measurement	-12 %...+14 % ^(PTB) (permissible: -13 %...+18 %) related to 1 mSv resp. 10 mSv/h
Overload	Exceeding the end value of the measuring range by up to 50 times, i.e. by up to 1250/2500 mSv/h (62AD25/62AD50) is detected. Device is still functional after overload ^(PTB)
Dose measuring range	0.1 µSv to 999 mSv ^(PTB)
Maximum possible measurement time for dose measurement	0.1 µSv/50 nSv/h = 2 h if you want to utilize the lower limit of the dose-measuring range of 0.1 µSv with an instrument zero effect of 50 nSv/h
Detection of individual pulses	Audible and visual (LED)
Freely programmable alarm thresholds	One alarm threshold each for dose rate and dose
Fixed alarm thresholds	There are several alarm categories (sets of fixed alarm thresholds) to choose from; see section 5.5

Climate (nominal operating ranges of ambient temperature and relative humidity)	–20 °C to +60 °C and 0 % to 95 % relative humidity, deviation –1 %...+2 % ^(PTB) (permissible: –13 %...+18 %) related to display at +20 °C and 65 % relative humidity (below –10 °C the LCD reaction will get slower.)
Atmospheric pressure	Nominal operating range 60 kPa to 130 kPa (600 mbar to 1300 mbar)
Dependency on position	None, any nominal operating range
Speaker generator	Melodic tunes for operator guidance and aggressive Alarm tone of approx. 2.1 kHz, min. 85 dB(A) at 30 cm distance
Monitoring of radiological operation	Automatic pulse rate monitoring; audible and visual alarms in the event of failure
Permanent memory	Flash memory, data retention 100 years, including: calibration parameters that cannot be changed, programmable parameters, Archive, including data of the last 308 uses
Display backlight	Backlighting with white LEDs
Serial interface, external probes	RS232, suitable for AmSeL compatible probes
Housing	Aluminium
Protection class	IP 67 by standard DIN EN 60529 (IEC 529)
Operating voltage range and power supply	5.0 up to 10.0 volts e.g. 9-volts battery block (IEC 6LR61)
Operating time with an alkaline manganese battery (IEC 6LR61)	Sleep mode (deep-sleep mode): three and a half years; Measuring operation under the following reference conditions: 0.1 mSv/h, pulse clicks (speaker) off, LCD backlight off, pulse flash (alarm LED) on: approx. 300 hours; otherwise, depending on dose rate, LCD backlight, speaker and alarm LED: 30 to 3 000 hours
Dimensions	130 × 80 × 22 mm ³
Weight	approx. 350 g including battery
Carrying strap	PES included in the scope of delivery

– SUBJECT TO TECHNICAL CHANGES–

INFORMATION ON ITEM NUMBER CONFIGURATION



Item numbers for available accessories:

761.50-01:	Holder to mount check source 6706
761.50-02:	Wall mount
761.50-03:	Wall mount with AC Adaptor 230V
894.1-Set:	Amsel-Adapter, allows connecting of 6150AD-Fam.probes to the 62AD
700.1.1:	Leatherette case in black
ZB01-0001:	Belt case
6605.36:	Outdoor-Plastic case (yellow)
MB12-0001:	Carrying strap
EB84-0237:	USB connection cable for data transfer
888.1.1:	Unlock key for locking and unlocking the programming functions

Example article number

62AD-3.1.2.1.0.1.2

Measuring range up to 50mSv/h
 Measured quantity: $H^*(10)$
 Device labeling in English
 Automess-Company logo
 Device color black