

## Product Datasheet

# Teletector<sup>®</sup> 6112AD

Microprocessor controlled dose rate meter  
with telescope for measuring photon radiation  
(gamma and X-radiation)

The Teletector's design emphasises high versatility without neglecting clearness and ease of operation.

Two GM counting tubes serve as detectors allowing a very wide dose rate range up to 10 Sv/h (1000 R/h). The counting tube probe is mounted at the end of a stainless steel telescope which can be continuously extended up to approximately four meters. This allows measurements at large safety distances and at places difficult to reach.

The connector at the side of the Teletector's housing provides a 5 Volt supply output and a serial interface. External probes of the AmSeL family can be operated at that connector. Alternatively a PC can be connected to exchange data according to AmSeL rules. These rules include reading of current and stored measurements, reading and writing the programmable parameters from and to the Teletector, and more. Free PC software is supplied for that purpose. The unlock key controlling access to test and programming functions also plugs into this connector.



### Features

- Safety by distance: Stainless steel telescope may be extended continuously up to a total length of approximately 4 m.
- Wide dose rate range from 0.01  $\mu\text{Sv/h}$  to 10 Sv/h (or 1  $\mu\text{R/h}$  to 1000 R/h) with automatic range selection and automatic switching between the two counting tubes.
- Simultaneously measures current, average, and maximum value of dose rate, as well as dose, also with external probes of the AmSeL family.
- One freely programmable alarm thresholds for both dose and dose rate, programming mode to customise operation to individual requirements.
- Permanent monitoring of counting tubes and batteries.
- LCD with analogue and digital indication and automatic backlight, speaker to guide the user and emit warning tones, orange-coloured LED for additional visual warnings.
- Motion sensor saves energy: automatically dims LCD backlight or even switches Teletector off when not used.
- Archive containing data of the last 496 Teletector uses.

# Specifications

<b>Low Range Detector</b>	Gamma tube LND7121, energy compensated, effective length 40 mm, sensitivity at Cs-137 approx. 5800 pulses per $\mu\text{Sv}$
<b>High Range Detector</b>	Gamma tube LND716, energy compensated, effective length 7 mm, sensitivity at Cs-137 approx. 100 pulses per $\mu\text{Sv}$
<b>Switching between Detectors</b>	Automatically with hysteresis: > 10 mSv/h (1 R/h): up < 3 mSv/h (0.3 R/h): down Manual selection of either detector for radiological check.
<b>Measuring Quantities</b>	Model 6112AD-Sv: $\text{H}^*(10)$ (unit Sv) Model 6112AD-R: JS (unit R)
<b>Measuring Range according to Time Constant</b>	»slow«: from 1 $\mu\text{Sv/h}$ (100 $\mu\text{R/h}$ ) »fast«: from 5 $\mu\text{Sv/h}$ (0.5 mR/h) in each case up to 9.9 Sv/h (990 R/h)
<b>Energy Range</b>	65 keV to 1.3 MeV
<b>Angular Range</b>	$\pm 45^\circ$ around preferential direction $0^\circ$
<b>Max. Deviation</b>	+15% / -10% (permitted: +18% / -13%) referred to +20°C and 65%
<b>Ambient Pressure</b>	60 to 130 kPa (600 to 1300 mbar)
<b>Speaker</b>	Pleasant melodies to guide the user and aggressive warning tone of ~2.1 kHz, > 85 dBA at a 30 cm distance
<b>Power Supply</b>	4.0 to 7.0 V Four C cells (LR14, AM2)
<b>Battery Life with Alkaline Batteries</b>	Sleep mode: > 15 years Measuring mode: depending on conditions 500 to 20 000 hours
<b>Protection Class</b>	IP 67 according to DIN 40050 <i>If telescope completely retracted and protective cap applied</i>
<b>Dimensions</b>	Length: 970 mm / 4170 mm (telescope retracted / extended) Width: 130mm Height: ~90 mm max
<b>Weight</b>	2.7 (3.0) kg without (with) batteries

Specifications are subject to change without notice.  
For the most up-to-date specifications, please visit [www.automess.de](http://www.automess.de)

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