

GRAETZ Probes

for dose rate meters of the X5C series

Product features

- Gamma probes for the measurand $\dot{H}^*(10)$ (ambient dose equivalent rate) and pulse probes for extending the measuring range of the basic unit
- For measurements at „hard-to-get-to“ places
- Telescope Probe DE for measurements from a safe distance at high dose rates (see separate documentation)
- Automatic probe identification by the basic unit
- Connectable to the basic unit either directly or by using a probe cable up to a length of 100 m (standard length: 1.25 m)
- Basic unit automatically displays the detectable kind of radiation of the connected probe

Gamma probes

- The basic unit automatically takes over the probe specific calibration factor
- Underwater measurements up to a depth of 30 m by using the optional pressurised water protective case
- Temperature range: -30°C up to +60°C
- Measuring size: $\dot{H}^*(10)$



Fig.: X5C plus

Type	Energy range	Measuring range	Dimensions, Weight
18509 CE	55 keV – 1.3 MeV	50 μ Sv/h – 1 Sv/h	length 126 mm, Ø 40 mm, 115 g
18529 C	70 keV – 3 MeV	200 mSv/h – 5 Sv/h	length 126 mm, Ø 40 mm, 110 g
18545 CE	40 keV – 1.3 MeV	150 nSv/h – 200 μ Sv/h	length 360 mm, Ø 25/40 mm, 350 g
18550 CE	40 keV – 1.3 MeV	10 μ Sv/h – 20 mSv/h	length 126 mm, Ø 40 mm, 130 g



Pulse probes (also connectable to GammaTwin S)

- Probes for the detection of α -, β - and γ -contaminations
- Highly sensitive scintillation probe for the detection of β -/ γ -radiation
- Glass immersion counter tube for measurements in liquids
- Indication range on the basic unit 0 – 20 kcps
- Difference between gamma and pulse probes: basic unit effects a pulse rate measurement instead of dose rate measurement and a summation of triggered counts instead of dose measurement
- Instead of the four dose and dose rate alarm thresholds, one pulse or pulse rate alarm threshold can be set on the basic unit

Type	Type of radiation	Detector	Background ²⁾ (counts/min)	Temperature range	Dimensions, Weight
18526 D	α , β , γ	GM tube; effective surface 6,1 cm ²	approx. 25	-30°C up to +60°C	length 126 mm, Ø 40 mm, 150 g
Immersion counter tube	β , γ	GM tube; effective length 150 mm	approx. 27	-30°C up to +60°C	length 290 mm, Ø 50 mm, 240 g (with beaker 275 g)
ABG170	α , β , γ	plastic scintillator; effective surface 170 cm ²	approx. 900 – 1800	-10°C up to +55°C	390x125x75 mm with handle 790 g
NaI scintillation probe 2002	β , γ	NaI(Tl) scintillator; effective volume 70x70x13 mm	approx. 135	-20°C up to +50°C ³⁾	80x85x35 mm with 200 mm handle, 530 g

²⁾ at ambient radiation from approx. 60 nSv/h to 100 nSv/h

³⁾ max. temperature change 10°C/h

