

GRAETZ Probes

for dose rate meters of the X5C series

Product features

- ▲▲ PTB-approved 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 max. length of 100 m (standard length: 1.25 m)
- ▲▲ Basic unit automatically displays the detectable kind of radiation of the connected probe

PTB-approved 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 pressurized water protective case
- ▲▲ Temperature range: -30°C up to +60°C
- ▲▲ Measuring size: $H^*(10)$



Fig.: X5C plus

Type	Energy range	Measuring range	PTB-Approval ¹⁾	Dimensions Weight
18509 CE	55 keV – 1.3 MeV	50 µSv/h – 1 Sv/h	23.71/05.01	length 126 mm, Ø 40 mm, 115 g
18529 CE	70 keV – 3 MeV	0.5 mSv/h – 10 Sv/h	23.71/05.02	length 126 mm, Ø 40 mm, 110 g
18545 CE	40 keV – 1.3 MeV	150 nSv/h – 200 µSv/h	23.71/05.03	length 360 mm, Ø 25/40 mm, 350 g
18550 CE	40 keV – 1.3 MeV	10 µSv/h – 20 mSv/h	23.71/05.04	length 126 mm, Ø 40 mm, 130 g

¹⁾ PTB-approved measuring range for measurements specifically demanded by German regulations



Pulse probes (also connectable to GammaTwin S)

- ▲▲ Probes for the detection of α -, β - and γ -contaminations
- ▲▲ High 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, a pulse respectively a pulse rate alarm threshold can be set at 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	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	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	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. 8100	-20°C up to +50°C ³⁾	80x85x35 mm with 200 mm handle, 530 g

²⁾ at ambient radiation

³⁾ max. temperature change 10°C/h

