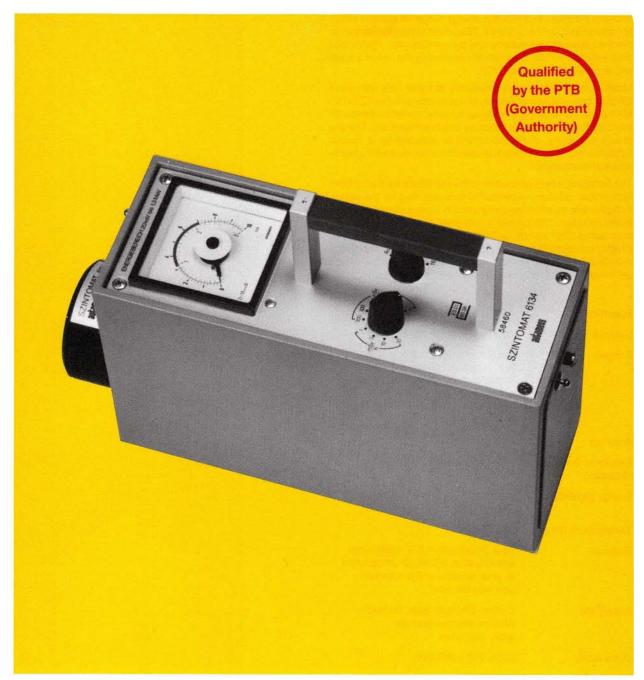
Automation und Messtechnik GmbH





- WIDE RANGE OF 0.002 mR/h TO 3000 mR/h OR 0.02 μ Sv/h TO 30 mSv/h
- EXCELLENT ENERGY RESPONSE OF 20 keV TO 1.3 MeV
- SMALL SIZE LIGHT WEIGHT
- VARIABLE METER RESPONSE TIME
- LARGE SCALE 270° DEFLECTION
- FOUR STANDARD D CELLS QUICKLY REPLACEABLE

SZINTOMAT 6134 DOSE RATE METER



Tel: +44 (0)1273 497600 www.southernscientific.co.uk

SZINTOMAT 6134 - DOSE RATE METER

The instrument is designed for measuring minimal dose rates over a wide energy range. The measuring range extends from background effect to 3 R/h, the energy range for gamma radiation covering 20 keV to 1,3 MeV. The power supply for the instrument is obtained from commercial dry cell batteries. Particularly clear indication of the dose rate ist obtained by the use of a scale with a pointer deflection of 270°.

Measurements which were previously possible only with great difficulty can now be made easily and elegantly with the SZINTO-MAT 6134, for example geological surveys, radiation measurement on X-ray plants, stay radiation measurements etc. The low energy sensitivity of the instrument is optained by a special scintillator combination which is used in conjunction with a highly stable photomultiplier.

The fluorescent light generated in the scintillator by the incident radioactive radiation, is converted and amplified by the photomultiplier into an electrical current which is proportional to the incident radiation. This current is indicated on a measuring instrument with a 270° pointer deflection after further amplification in a highly stabilised D. C. amplifier. The time constant of this instrument is adjustable in several stages. Precise measured values are therefore obtained even for very small dose rates.

Specifications

Detector Special scintillator combination

Ranges Ten linear ranges 0-0.1, 0-0.3,

 $\begin{array}{c} 0{-}1,\,0{-}3,\,0{-}10,\,0{-}30,\,0{-}100,\\ 0{-}300,\,0{-}1000,\,0{-}3000\,\,mR/h\,\,or\\ 0{-}1,\,0{-}3,\,0{-}10,\,0{-}30,\,0{-}100,\\ 0{-}300\,\,\mu Sv/h;\,0{-}1,\,0{-}3,\,0{-}10, \end{array}$

0-30 mSv/h full scale

Accuracy ± 20 %

Response time

(3 stages)

1, 4, 16 seconds

Energy dependance less than 15 % between 20 keV

and 1.3 MeV

Temperature range -20°C-50°C

Batteries Four D size cells 1.5 V, complying

with BA-30 or IEC R 20, all batteries or accumulators of this standard

size may be used

Battery life Carbon-zinc type appr. 50 hours,

Alkaline-manganese type

appr. 100 hours

Dimensions 285 x 100 x 200 mm

Weight Appr. 3.6 kg

- SUBJECT TO CHANGE WITHOUT NOTICE -



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