CALEN
ALPHA Counter

❍ **FOR SPOT MEASUREMENT OF RADON IN ATMOSPHERIC ENVIRONMENT**

❑ The apparatus is specially adapted to the counting of scintillating flasks produced by ALGADE.

❑ Portable apparatus comprising a photomultiplier in conjunction with a counting chain.

❑ CALEN meets the requirements of NF M60-769 standard " Methods for spot measurement of the volumic activity of radon in atmospheric environment ."

❑ APPLICATIONS

- Cartography of buildings as per NF-M60-771 standard " Radon222, Methodologies applies for the screening and for the complementary investigations".
- Monitoring of working areas.

SPECIFICATIONS

Sensor used :
Photomultiplier 10 stages
Photocathode diameter 37 mm
Maximum sensitivity 420 nm
Background noise < 0.2 counts / hour @ 20°C
High Voltage power supply .

Controls : by 2 push buttons.
Pre selected times :
5, 10, 30, 60, 600 seconds.
Maximum counts : 99 999 events.
Cycles : from 1 up to 999

Display : Liquid crystal screen with 2 lines of 16 characters
Connection to PC :
by RS232C link
3 wires TxD, RxD, Gnd / 19200 bauds/ 8 data bits / No parity / 1 stop bit.

Power supply :
External sector 220 V. 50 Hz to 12 V. DC.

Microcontroller :
PIC 16F73 type @ 16 MHz
4 kbytes of flash memory
2 banks of 96 bytes RAM memory
C language.

Safety :
High voltage power supply automatic switched off when cover removed,
Fuse 5*20 mm 500mA delayed.

Casing : made of polycarbonate plastic.
Weight : 880 g.
Size : 200* 135* 278 (L*l*h) mm

Temperatures :
storage -20°C to +60°C
operating 0°C to +40°C
Protection index : IP40

CALEN is delivered with :
A RS232 serial cable,
An External 12V power supply,
A manual.

* in this document, RADON means RADON 222.

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