



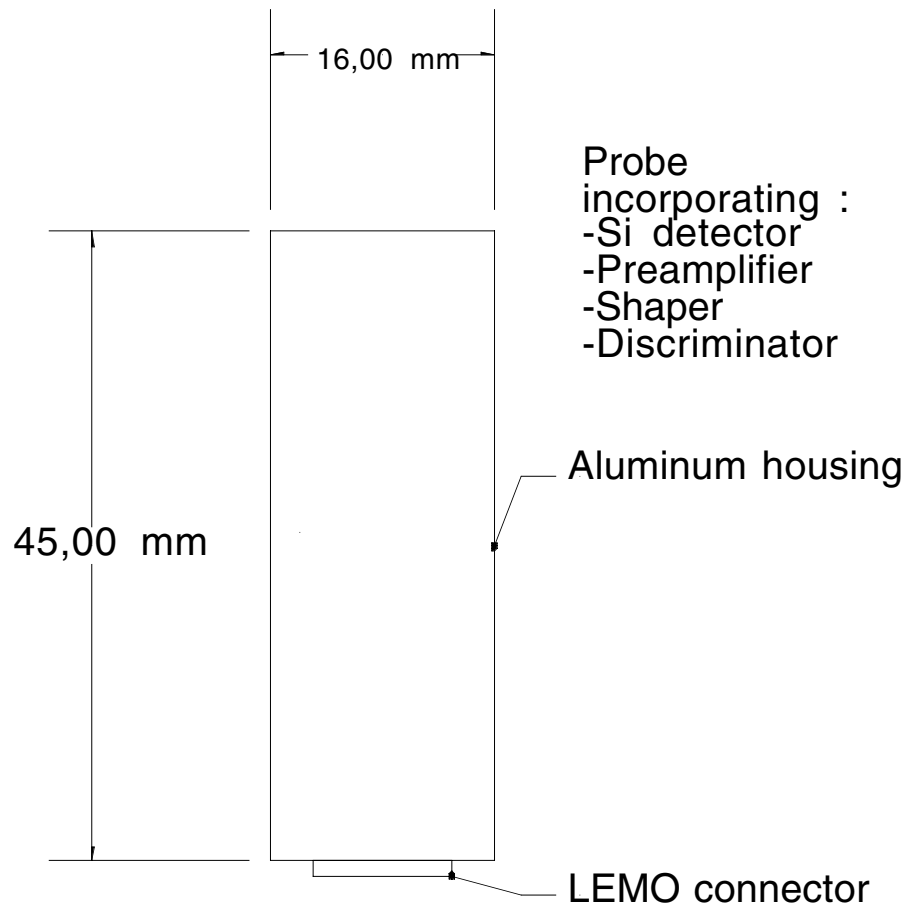
## MAIN CHARACTERISTICS OF THE MINIATURE SILICON PROBE MODEL PSD16

The miniaturised Si-diode based gamma ray detection probe is designed for indication and approximate dose rate measurement of gamma radiation for energies between 60keV and up to above 1 MeV. The sensitivity is about 200 counts at 1Rad/h within the total energy range.

The device incorporates the biasing circuit of the Si diode, the preamplifier, a shaping amplifier and the discriminator. The probe delivers for every detected gamma photon a 20 $\mu$ s long TTL standard output pulse. The energy threshold level can be optionally adjusted from distance by means of a current or the device is delivered with a fixed threshold of 60keV or external setup.

The Si detector with associated electronics are housed in a diameter  $16 \pm 0.1$ mm and length 45mm (excluding connector) cylindrical box made from an aluminium alloy. Weight 15g.

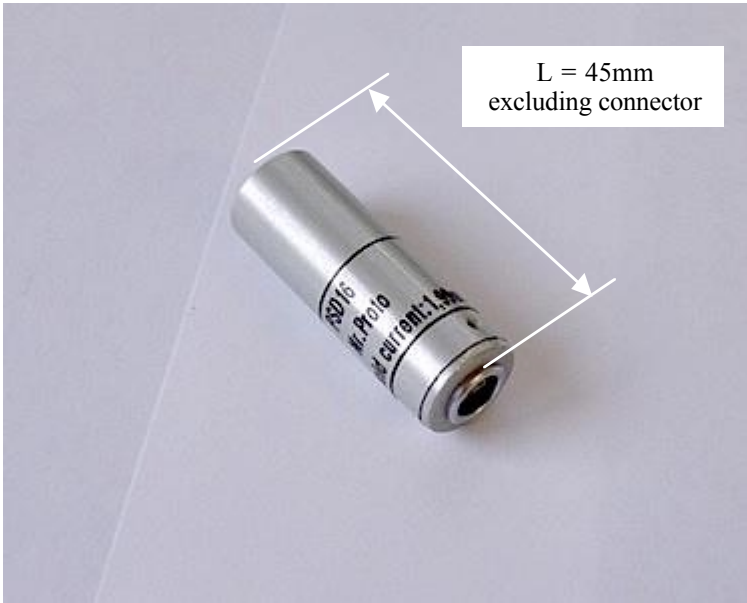
The probe's compactness and rugged design allows its use in an industrial or medical environment with restrictive demands concerning the maximum device size.



Signals driven by LEMO :

- Ground
- Output TTL signal
- Threshold setup : 1.5 to 2m
- Power supply : +9V

Complete probe



Electronic circuits and silicon detector

