



Applications

- Early warning of radioactivity in the environment
- Research institutions
- Border control
- Nuclear facilities
- Steel industry

Features and Benefits

- Portable instrument
- Battery powered
- Short response time
- Built-in speaker
- Light weight: 0.23 kg
- 100 hours of continuous operation with 9 V battery

"Praskač" (Scratch) is a pocket detector of ionizing radiation. We use it to quickly detect radioactivity in the environment.

A thin-walled cylindrical Geiger Mueller tube is built into the instrument; each current pulse triggered by a photon through it amplified causes an acoustic signal. At normal background activity (approx. 100 nSv/h) we hear about 10 bursts per second. Up to a dose rate of approx. 10 μ Sv/h we hear crackling, which turns into buzzing at higher dose rates. At even higher dose rates, the sound slowly dies down.

Replacable 9 V battery can power the instrument continuously for 100 hours. As the sound becomes weaker, the used battery can be replaced.

Technical specifications

Dimensions	135 mm x 60 mm x 30 mm (L x W x H)
Mass	230 g
Power supply	replacable battery 9V
Detector	cylindrical thin-walled GMpipe SBM20
High voltage	400V
Background	approx. 10 imp/min (100 nSv/h)
Cracking	up to approx. 1 μ Sv/h
Scratching	approx. 1 μ Sv/h to 10 μ Sv/h
Buzzing	above 10 μ Sv/h
Upper use limit	approx. 1 Sv/h

