

Cased hole

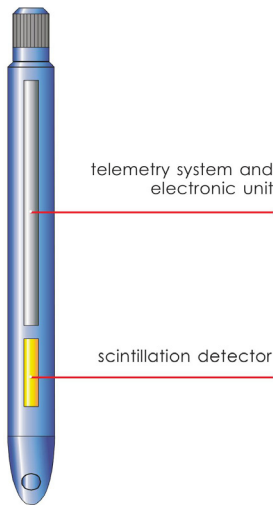
TzSP-GK-S-60/73/76/90* Digital gamma-ray spectral logging tool

is designed for natural radioactive element content quantitative measurements: thorium (Th), uranium (U) and potassium (K) in rocks while different wells surveying.

FEATURES AND ADVANTAGES

- interval-by-interval full gamma-ray spectra accumulation for further digital data telemetering;
- improved accuracy while U, Th, K content determination;
- analytical accounting of well design effect (diameter, casing, cement bond);
- referenceless energy scale stabilization and calibration, gain control

SPECIFICATIONS



Content measurement range, %	
- K	0,1-20
- U	$(1-100) \cdot 10^{-4}$
- Th	$(1-100) \cdot 10^{-4}$
Gamma-quantum energy range, MeV	0,06÷3
Measurement basic relative error, %	up to 5
Scintillation detector type	NaJ(Tl)/CsI(Na)/ BGO
gamma-ray energy resolution (660 KeV), %	up to 12/14/15
Energy channel number	256
Power supply voltage, V	50-75
Current consumption, mA	up to 100
Maximum hydrostatic pressure, MPa	60
Maximum operating temperature, °C	120
Downhole tool dimensions, mm:	
- diameter	60/73/76/90
- length	up to 1200
Weight, kg	up to 8/10/15/20

The downhole tool contains registration and processing electronic module, telemetry system and scintillation detector with photoelectronic multiplier. The tool is provided with full software for Vulkan, Gektor recorder and interpretation software for openhole and cased borehole logging. The tool is to be run with one-core or three-core logging wireline.

*The apparatus is certificated.