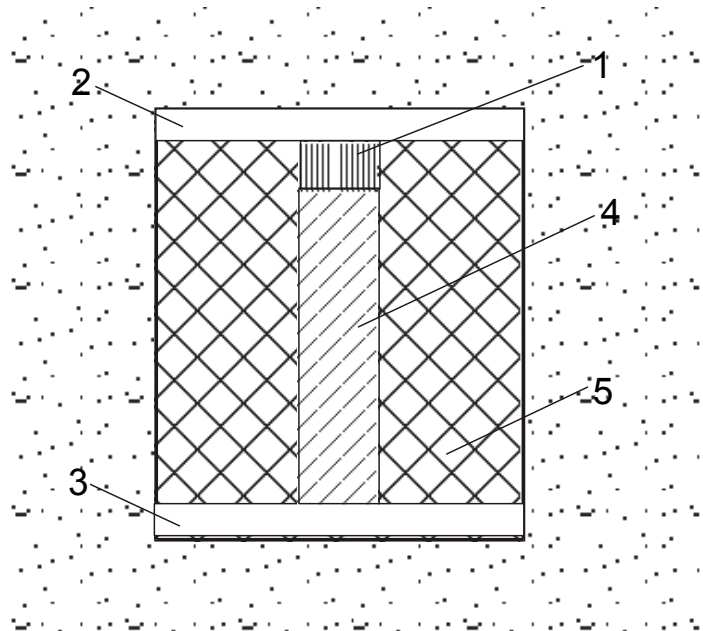




- Intended for electric power supply to alarm and guard equipment, radio beacons, weather stations, various devices and instruments of radioelectronic equipment under field conditions.
- The operating principle of thermoelectric power source is direct conversion of soil thermal energy into electric energy.

Appearance and schematic diagram of thermoelectric generator



- Thermoelectric generator is buried in soil and according to weather conditions can work in two modes. In warm weather or in the daytime thermal flow from more heated soil strata comes to upper concentrator 2 transferring heat to hot junctions of thermoelectric module 1 located under the concentrator. Cold junctions of thermoelectric module contact heat sink 4 having low thermal resistance along which heat that passed through thermoelectric module is transferred to lower concentrator 3 to be dissipated in colder soil strata. In cold weather or at night thermal flow comes to lower concentrator 3 from warmer soil strata and is transferred by heat sink 4 to thermoelectric module. The upper concentrator 2 in this case dissipates heat passing through thermoelectric module.

- Thermoelectric generator housing is made of bio- and hydroresistant heat insulating material, the concentrators have a protective antirust coating.

- The operation of thermoelectric generator is acoustic noise-free.

- Thermoelectric generator buried in soil is not visible, is capable to work in hard-to-reach places unattended.
- Thermoelectric generator is ecologically clean electric power source.

**Parameters of thermoelectric generator at temperature difference
between concentrators ~ 8 K**

№	Parameter, measurement unit	Values
1.	Output voltage, V, not less	1.5
2.	Output power, mW, not less	1.2
3.	Overall dimensions, mm height diameter	250 96
4.	Weight, kg, not more	2.0

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