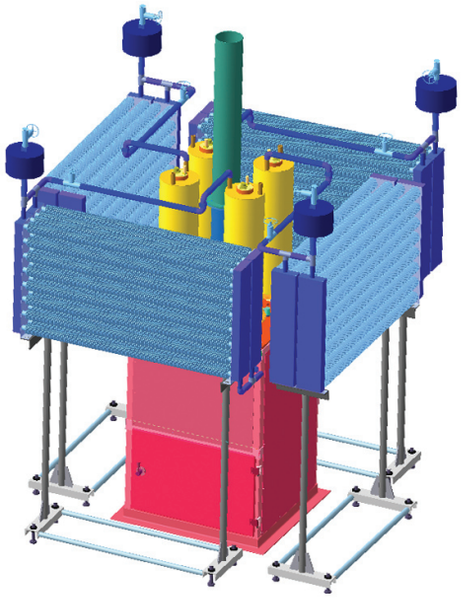
Thermoelectric Self-contained Current Source

The thermoelectric self-contained current source (AITT – 500G) is intended for self-contained power supply of electricity consumers, and has parameters compatible with characteristics of the specific assembly. Electrical energy is generated by a thermoelectric generator with thermal energy conversion. Consumers of electrical energy are cathodic protection systems of main gas pipelines, technological systems, field gathering systems and gas treatment and etc. The primary energy source for AITT – 500G is natural gas, flowing to the assembly from high pressure main gas pipeline ~ 100 atm. The AITT – 500G is a product of many repeated cyclical applications, which is repairable and rebuildable. The assembly fits in protection container in vandal-proof protection with a ventilation system and a fume-collecting chimney.



Technical characteristics of AITT – 500 G

Parameter	Value
Direct current output voltage on optimal load, V	28,5±0,5
Nominal power, W, not less than	500
Fuel type	Natural gas
Insulation resistance in cold condition, Mohm, not less than	10
Insulation resistance in operating condition at the upper value of the operating temperature, Mohm, not less than	3,0
Specific gas flow rate at burner intake pressure of not more than 0,5 ATM., m^3/h, not more than	3
Life time, years, not less than	20
Self-containment, h, not less than	8760
Dimensions, mm	2500x2500x4000
Weight, kg, not more than	2000

Advantages:

- High reliability;
- Long operation without service in any climatic zone (temperature range -52 °C … +50°C, climatic performance UHL1 can be adapted to operate in the regions of the Far North).

17/2, Dorozhnaya st., Voronezh 394062 Russia
phone +7-4732-316-451, fax +7-4732-704-734