NEW!

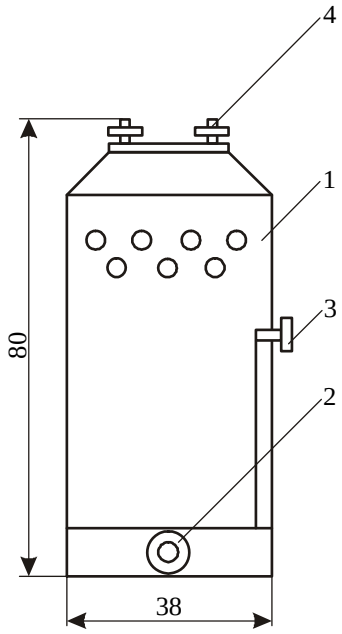
INSTITUTE OF
THERMOELECTRICITY
• UKRAINE •

THERMOELECTRIC MICROGENERATOR
ALTEC - 8031

• Intended for direct current electric power supply to various radioelectronic devices and low-power instruments.

• The operating principle of thermoelectric microgenerator is based on direct conversion of thermal energy from gas fuel (propane-butane) combustion into electric energy based on thermoelectricity.

Appearance and schematic diagram of thermoelectric microgenerator



1 - generator housing; 2 - generator refuelling device; 3 - valve; 4 - electric terminals.

• Thermoelectric generator consists of cylinder housing 1 accomodating inside thermoelectric converter and catalytic burner with fuel vessel. Arranged in the bottom part of the fuel vessel is device 2 for occasional refuelling of generator. Valve 3 serves for gas delivery to the burner .Electric terminals 4 for connection of external load are arranged in the upper part of microgenerator housing. The thermoelectric microgenerator is started from match or lighter flame.

• The use of catalyst provides complete combustion of propane-butane and prevents formation of harmful substances in gas combustion products.

• Stability of temperature characteristics of catalytic burner is practically independent of the influence of external factors.

• For electric energy generation use is made of readily available gas fuel.

• Use of liquefied propane-butane fuel provides consumer with independent electric energy supply.

Parameters of thermoelectric microgenerator

№ п/п	Parameter, measurement unit	Value
1.	Electric voltage, V	3
2.	Electric power, mW	10
3.	Kind of fuel	Liquefied propane-butane
4.	Fuel flow rate, g/h	0.09
5.	Time of continuous operation at one filling of fuel vessel, h	125
6.	Dimensions, mm	
	Diameter	38
	Height	80
7.	Weight, g	75

Orders and additional information: General Post Office, Box 86, Chernivtsi, 58002, Ukraine; e-mail: ite@inst.cv.ua; fax: (380-3722)-41917; phone: (380-3722)-41917; http://ite.cv.ukrtel.net.