

GPTN

The module is intended for use as part of information measuring systems based on the VXI-bus trunk. The module is designed to generate direct current or constant voltage.

The module is a register-based device and has the dimensions C-1.

The module provides the indicated current and voltage via two independent isolated channels.

Software calibration and self-monitoring of the module is performed when measuring circuits are connected to the output of the module and do not change their state.

The module provides both current protection and voltage protection.

Current protection works by the principle of limiting the output current to a level not exceeding the set value.

Voltage protection works on the principle of limiting the output voltage to a level not exceeding the set value.

When protection is triggered, this is reported to the user or user program.



Specifications

The number of independent channels - 2	Ranges of the established current, mA: - range 1 from 0.1 to 10.00 in increments of 0.005; - range 2 from 10.05 to 100.00 in increments of 0.05
Ranges of the established tension, V: - range 1 from 0.1 to 10.00 in increments of 0.005; - range 2 from 10.05 to 50.00 in increments of 0.025	Accuracy of setting current and voltage $\pm (0.3 + 0.02 * (A_m / A_x - 1))\%$, where A_m is the value of the upper limit of the installation range; A_x - set value
Load Connection Diagram - Two-wire	Output resistance of the voltage source (to the connector contacts), no more than 0.3 Ohm
Additional error in setting the output voltage caused by the flow of the load current through the output resistance in the steady state, no more $-0,3 * I_H / U_x * 100 \%$ where I_H - the magnitude of the load current (A); U_x - set voltage value (V)	The total voltage installation error is equal to the sum of the installation error and the additional error
	The output power of the generator for each channel is at least 1 W
The voltage source contains current protection. Protection operation level is set by software	Ranges of installation of current protection correspond to ranges of the established current
The current source contains voltage protection. Protection operation level is set by software	The voltage protection setting range corresponds to range 1 of the voltage setting
The settling time from the moment the information is written to the module until the specified value appears at the output of the module at the active load is not more than 0.5 ms	The module provides galvanic isolation between the channels, as well as between each of the channels and the module circuits
Breakdown voltage of electrical insulation between any pair of galvanically isolated circuits is not less than 200 V	