Arbitrary waveform generator **MGV2**

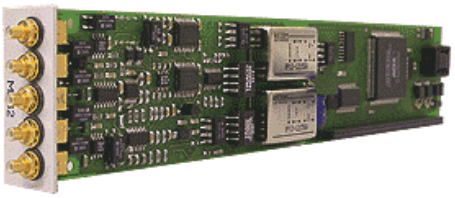
The MGV2 mezzanine is designed to play arbitrary waveforms on three channels (two main and one control).

MGV2 provides the termination of signal playback by the external command “Stop generation” from the SHD connector.

MGV2 provides the ability to sum the signals at the outputs of the main channels with a signal from an external voltage source applied to the SUM connector.

The output circuits of the mezzanine channels are galvanically isolated from the housing. The dielectric isolation insulation strength is at least 200 V. The insulation isolation resistance is at least 20 MOhm

Checking the main technical characteristics in self-monitoring mode.



Specifications

Arbitrary waveform playback on three channels (two main and one control)	Range of installation of amplitude of an output signal ± 10 V
Limits of permissible relative error in setting the amplitude of the output signal with an attenuation coefficient of the output signal equal to unity,%: ± [0,02 + 0,004×(Up/Uust – 1)], where Uп – the value of the upper limit of the range, V; Uust – the set value of the output voltage, V	Programmable hardware attenuation of the output signal at the outputs of the main channels in the range from 1/65535 to 1
	Sampling frequency setting range: from 21.632 kHz to 192 kHz
	Frequency range of the generated sinusoidal signal from 1 Hz to 25 kHz
The limits of the permissible relative error in reproducing the set frequency of the sinusoidal signal in the range from 1 Hz to 25 kHz with an error in the clock frequency of the mezzanine carrier of not more than ± 0.00005% are ± 0,08%	Uncompensated zero offset after auto calibration: • no more than ± 500 μV at Katt = 0 dB, • no more than ± 1,5 mV at Katt = 60 dB, where Katt is the programmable attenuation coefficient of the linear attenuator of the mezzanine
Maximum load capacity - not more than 0.01 μF	Output current - no more than 100 mA