

# Frequency Distribution Amplifier VCH-611

 [vremya-ch.com/index.php/en/products-en/signgen-en/vch-611-en/index.html](http://vremya-ch.com/index.php/en/products-en/signgen-en/vch-611-en/index.html)



Frequency distribution amplifier is designed for ultra-low-noise distribution of sinusoidal signals 1–100 MHz with unity gain. It allows checking for signals availability via RS-232 interface. The basic model has 3 inputs / 12 outputs (3 modules 1 / 4). For the information about possible

modifications, please contact us.

## Key applications:

- time and frequency high precision measurement systems;
- time and frequency etalon systems.

## Specifications

Input signals: sinusoidal 1–100 MHz.

Maximal power of the input signals: 17dBm.

Amplifier gain:  $(0 \pm 1)$  dB.

**All characteristics presented below are guaranteed for sinusoidal signals  $5 \pm 0.00005$ ,  $10 \pm 0.0001$ ,  $100 \pm 0.001$  MHz and RMS input voltage  $1 \pm 0.1$  V at 50 Ohm**

Isolation between channels no more, than the values in the table

	Signal frequency		
	5 MHz	10 MHz	100 MHz
<b>Output/Output</b>	-120 dB	-120 dB	-100 dB
<b>Input/Output</b>	-120 dB	-120 dB	-100 dB
<b>Input/Input</b>	-120 dB	-120 dB	-100 dB

Harmonic distortions introduced by the amplifier no more than  $-40$  dB at 5, 10 MHz and no more  $-35$  dB at 100 MHz.

Allan deviation 1 sec introduced by the amplifier is no more than  $4.0 \cdot 10^{-14}$ .

Ultra low phase noise (single-side power spectral density) added by the amplifier is no more than the values in the table

Frequency offset	Signal frequency		
	5 MHz	10 MHz	100 MHz
1 Hz	-141 dBc/Hz	-141 dBc/Hz	-130 dBc/Hz
10 Hz	-150 dBc/Hz	-150 dBc/Hz	-145 dBc/Hz
100 Hz	-155 dBc/Hz	-155 dBc/Hz	-150 dBc/Hz
1 kHz	-161 dBc/Hz	-161 dBc/Hz	-155 dBc/Hz
10 kHz	-163 dBc/Hz	-163 dBc/Hz	-160 dBc/Hz

Temperature coefficient no more than 5 ps/°C.

Power supply: AC (100÷240) V, (50÷60) Hz; DC (22÷30) V.

Power consumption is no more than 45 V·A (for AC) and no more than 40 W (for DC).

Status information is available via RS-232 interface.

Weight is no more than 4 kg.

Dimensions: 310.0×483.0×44.0 mm (1 U)

