



Frequency Distribution Amplifier VCH-605



Frequency distribution amplifier is designed for ultra-low-noise distribution of sinusoidal signals 1 MHz – 100 MHz. The device has 3 independent channels with 1 input and 4 outputs each.

VCH-605 can be used as an integrated solution in automated measurement systems. Port signal status can be checked via RS-232 interface.

Key Applications

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



VCH-605 Specifications

Inputs :

Wave-form	Qty	Amplitude	Load	Termination
1MHz - 100 MHz (Sine)	3	< 17 dB	50 Ω	SMA

Outputs :

Wave-form	Qty	Load	Termination	Amplifier	Options
1MHz - 100 MHz (Sine)	12	50 Ω	SMA	(0 ± 1) dB	Amp. (5±1) dB

Note: All characteristics presented below are guaranteed for sinusoidal signals 5±0.00005, 10±0.0001, 100±0.001 MHz and RMS input voltage 1±0.2 V at 50 Ohm.

Isolation between channels	Frequencies (MHz)		
	5	10	100
Outputs/Outputs	<-120 dB	<-120 dB	<-100 dB
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Ultra low phase noise (SSB)

Offsets	Frequencies (MHz)		
	5	10	100
1 Hz	-141dBc/Hz	-141dBc/Hz	-130dBc/Hz
10 Hz	-150dBc/Hz	-150dBc/Hz	-145dBc/Hz
100 Hz	-155dBc/Hz	-155dBc/Hz	-150dBc/Hz
1 kHz	-161dBc/Hz	-161dBc/Hz	-155dBc/Hz
10 kHz	-163dBc/Hz	-163dBc/Hz	-160dBc/Hz

Instability ADEV@ 1s	< 4.0×10 ⁻¹⁴
Harmonic @5 &10 MHz	< -40 dB
Harmonics @100 MHz	< -35 dB
Temperature coefficient	< 5 ps /°C
Status Information I/F	RS-232C

General

Operating Temperatures:	+10°C ... +35°C (Warm-up: 2 Hours)
Humidity:	< 80% @25°C
Power Supply AC:	100-240V, 50/60 Hz ;(Consumptions: 45VA)
Power Supply DC:	22 ~ 27 V ; (Consumptions: 40W)
Dimension1U(WxHxD):	483×44×310 mm.
Weight:	~ 4Kg

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