

10 GHz Generator / Amplifier Gen10-40

Characteristics

- Generator or amplifier at 10 GHz with 40 W of output power
- Output frequency and power easily adjusted over a knob
- Safe operating system with isolator
- Generator available as simple VCO or as frequency stabilized synthesizer
- Optional with display for frequency, output power and reflected power

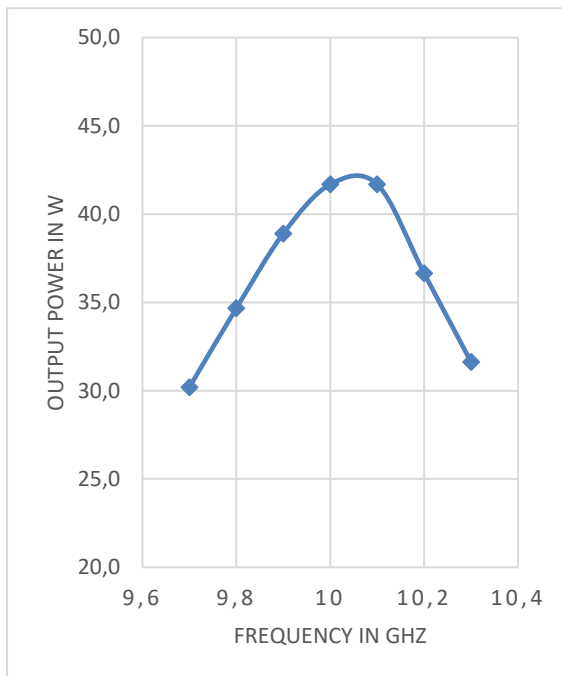


Fig. 1: Typical output power over frequency

The Gen10-40 generator / amplifier has an output power of up to 40 W in the frequency range between 9.7 and 10.3 GHz, whereas both the frequency and power can easily be adjusted over a knob. Alternatively, operating parameters can also be switched over to a connector on the backside and set through analog voltage levels.

The 10 GHz components are available as a simple amplifier (Gen10A-40), as VCO power generator (Gen10V-40) as well as a synthesizer (Gen10S-40) with a stabilized output frequency. All versions show the operating frequency and the output power.

A measurement option is also available for all configurations, where the reflected power is measured. This value is then available as an analog voltage on the connector and displayed at the same time.

The power is set as a percentage of the available power at the operating frequency.

The system is efficiently water cooled for highest efficiency levels. When required, we can also deliver a corresponding water cooling block.

Features and Specifications

- Frequency range: 9.7 GHz – 10.3 GHz
- Maximum output power: > 40 W at 10.1 GHz
- Dimensions: 470 mm x 330 mm x 170 mm (l x w x h)
- Supply voltage: 110 V – 230 V (210 W)
- Waveguide connector: WR90
- Required water cooling flow at 2 l / min
- Water connectors: 6 mm outer diameter

Tab.1: Specifications of the 10 GHz generator/amplifier Gen10-40.

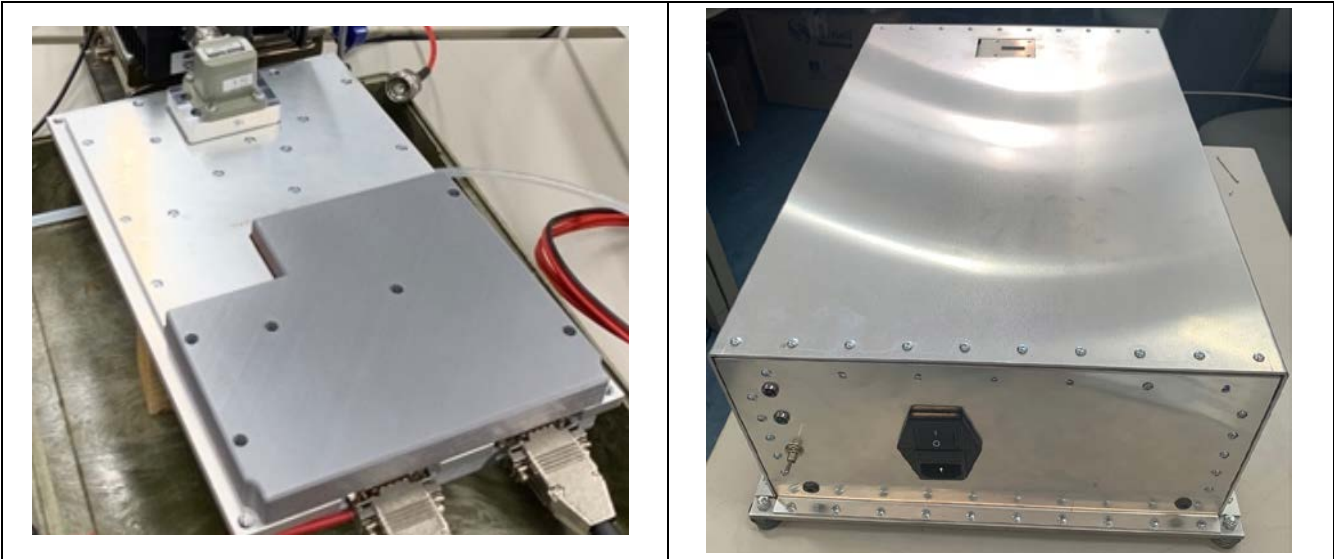


Fig. 2: Left: Inner module of the 10 GHz generator; Right: Full generator without display

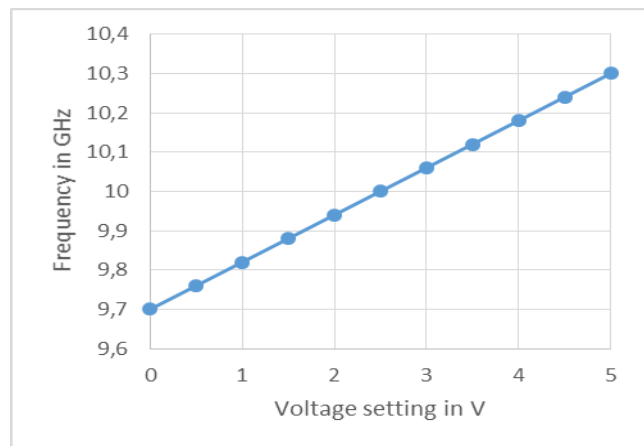
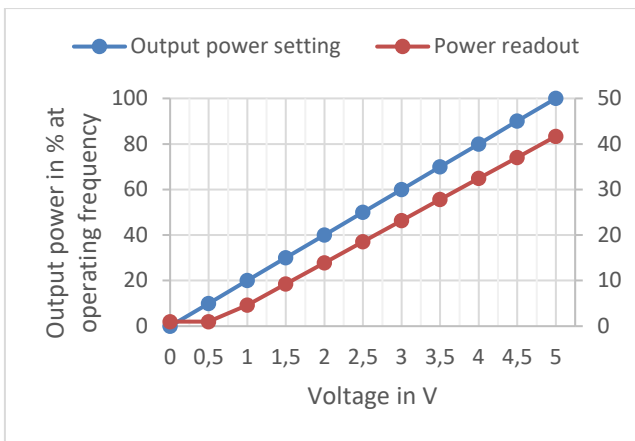


Fig. 3: Graphs of the VCO power generator Gen10V-40 for voltage settings and readouts:
left: power setting (in % of maximum power at operating frequency) and power readout (M option)
right: frequency setting

Pin settings

Pins 1, 6:	GND
Pins 4, 5, 8, 9:	not connected
Pin 2:	Frequency setting
Pin 3:	Output power setting
Pin 7:	Readout output power

M option

Pin 8:	Readout reflected power
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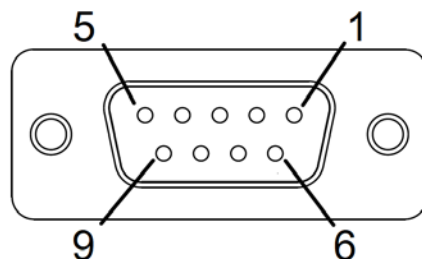


Fig. 4: D-SUB9 connector at the rear

Ordering information

Please contact us for price information of the corresponding generator:

Configuration	basic version	option: M measurement
Voltage controlled oscillator (V)	Gen10V-40	Gen10V-40M
Synthesizer (S)	Gen10S-40	Gen10S-40M
Amplifier (A)	Gen10A-40	Gen10A-40M

Guaranty

The guaranty period is 1 years after delivery.

The guaranty does not cover defects based on wrong operation or improper usage, such as connectors not being properly attached or insufficient cooling.

Contact

Heuermann HF-Technik GmbH
Auf dem Anger 29,
D-52076 Aachen, Germany
Mail: info@hhft.de ;
Internet: <http://www.hhft.de/>
Tel.: +49 2408/9379019
Fax: +49 2408/9379952