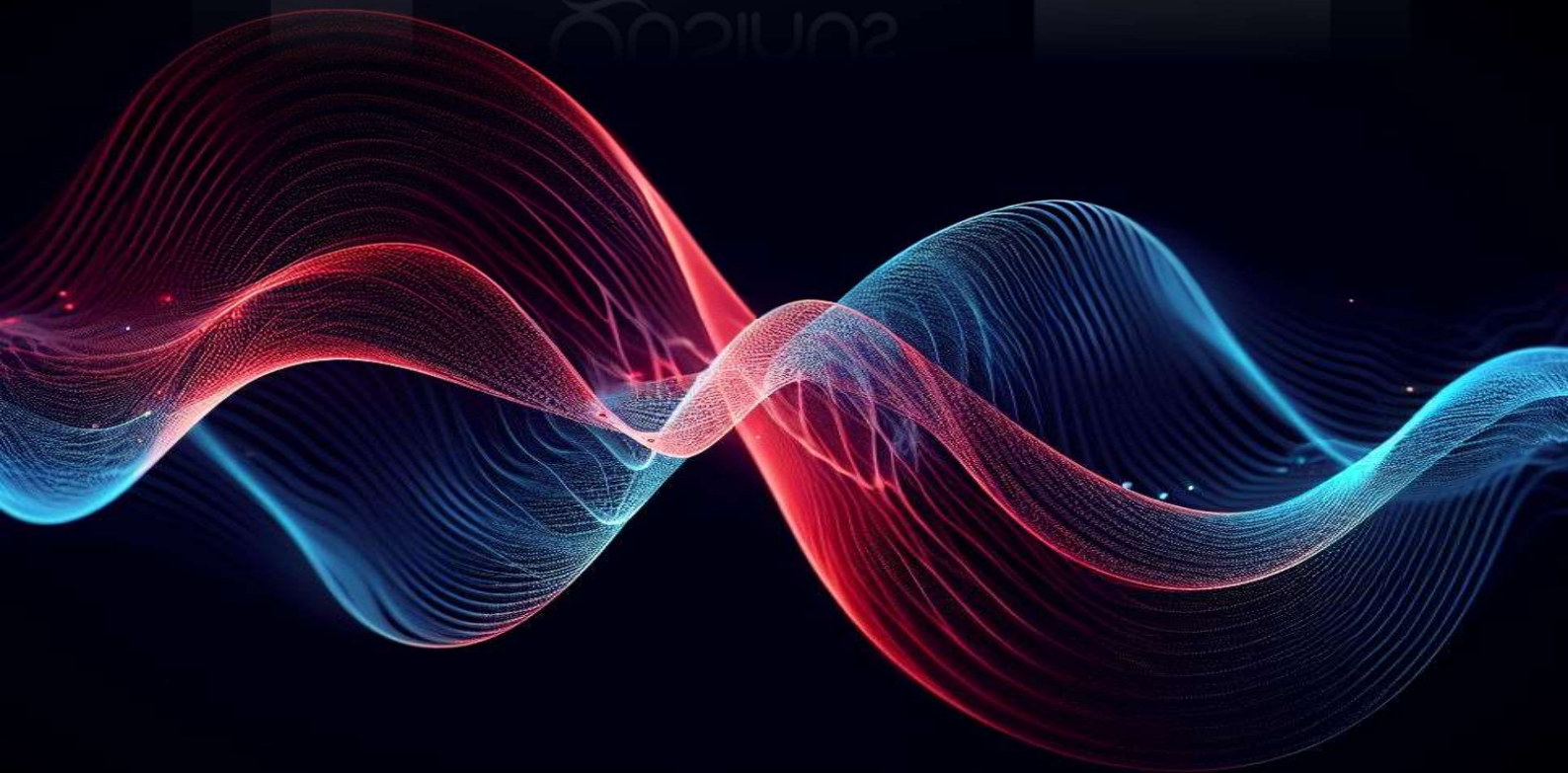
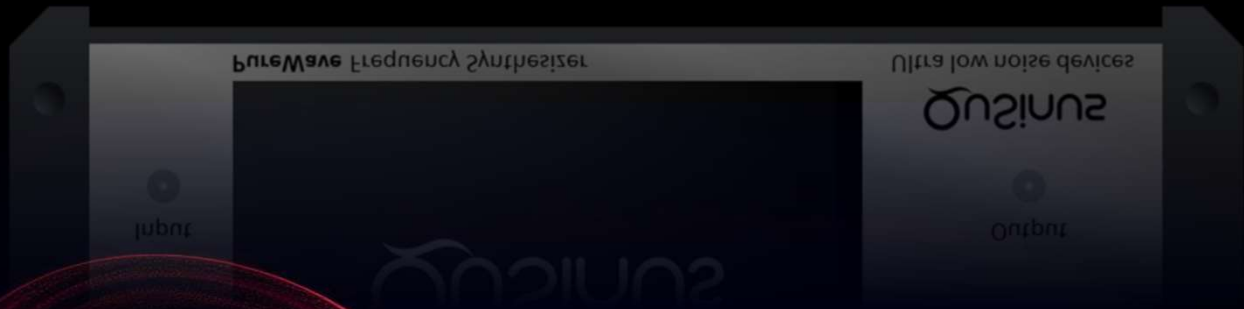
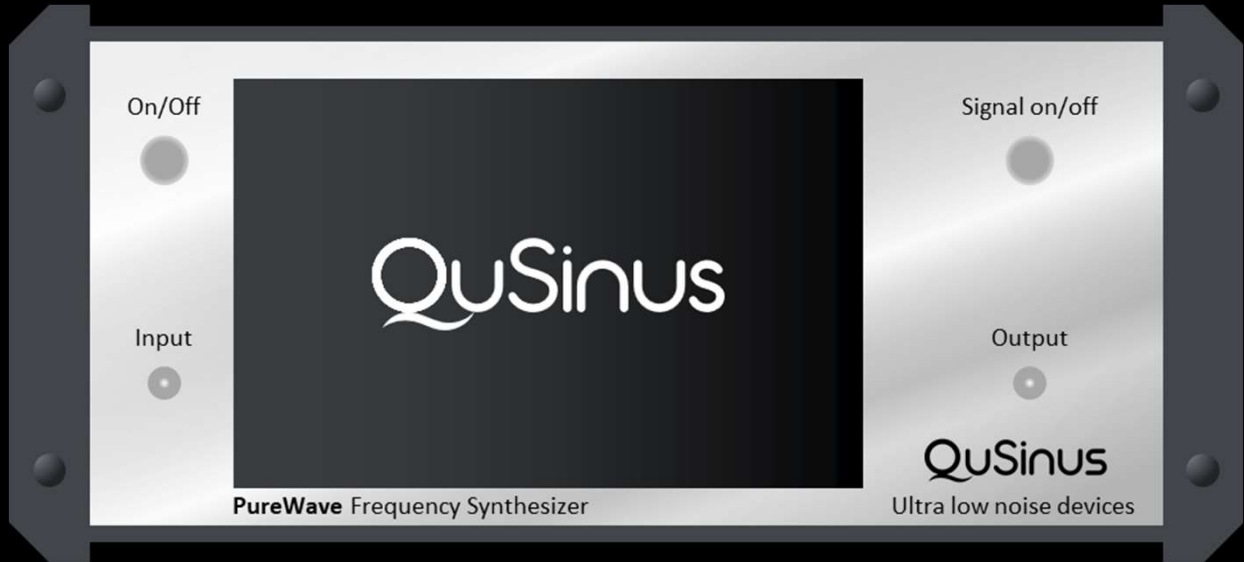


Opto-electronic
RF/microwave Signal Generator
with ultra low noise

QuSinus



NEW GENERATION OF SIGNAL GENERATORS

Signal integrity and frequency stability are essential distinguishing characteristics of a high frequency microwave signal generator. The QuSinus PureWave signal generator product line has been meticulously designed to deliver the world's best signal purity and frequency stability across a frequency range of 3 GHz to 10 GHz, while maintaining unwavering performance even at high power output levels.

Powered by state-of-the-art technology, our signal generator achieves a precision in time interval measurement that surpasses conventional standards by orders of magnitude. This remarkable level of precision is complemented by an intuitive, modern and user-friendly interface. The QuSinus PureWave ultra-low noise RF/microwave signal generator offers exceptional overall utility and long-term value for a broad range of measurement applications.

KEY FACTS & BENEFITS

- Industry leading phase noise of -160 dBc (meas.) at 10GHz and 100 kHz offset
- Mode-lock-laser as reference clock for best-in-class jitter and superior performance
- Frequency range of 3 GHz to 10 GHz, optional to 20 GHz
- Modern state-of-the-art 10" touchscreen
- Compact bench-top form factor with 4 HU and 19" width

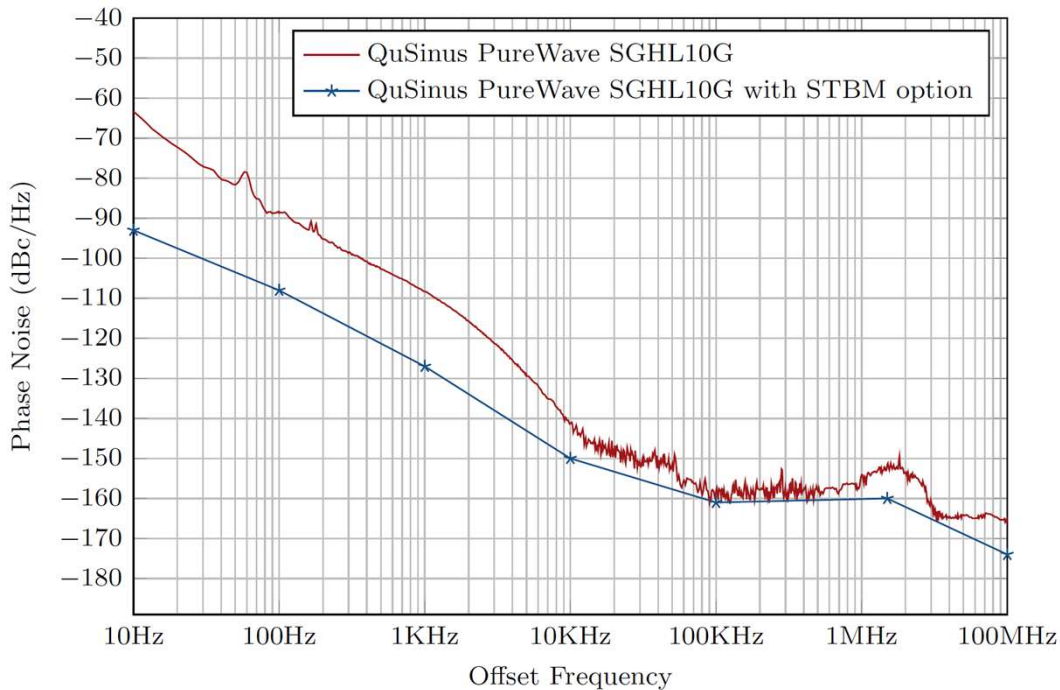
SPECIFICATIONS

Model	QuSinus PureWave SGHL10G
Frequency range	3 GHz – 10 GHz, optional to 20 GHz at harmonics of MLL repetition rate 250 MHz steps
Output level	+10 dBm to -10 dBm ¹⁾
Phase noise at 10 GHz	-160 dBc/Hz (100 kHz offset frequency)
Integrated jitter	1 KHz to 100 MHz: typical 3 fs ¹⁾
FM mod.	On demand
AM mod.	On demand
Phase mod.	On demand
Pulse mod.	On demand
Sweep mode	On demand

¹⁾ To be characterized

SIGNAL GENERATOR PERFORMANCE

Phase-noise



OPTIONS

Frequency extension	up to 20 GHz
Mode-lock laser options	MENLO ELMO with 100 MHz repetition rate
Mode-lock laser options	NKT ORIGAMI-15-100 with 100 MHz steps
Mode-lock laser options	Menhir MENHIR-1550 with 250 MHz repetition rate
STBM	Stabilization module for low offset frequencies
High output level boundary	+18 dBm ¹⁾
Low output level option 1	-35 dBm ¹⁾
Low output level option 2	-70 dBm ¹⁾
Remote control	Via LAN or USB

¹⁾ To be characterized

CUSTOMIZATION

You have special requirements or need features that we currently don't offer out of the box? Get in contact! At QuSinus, we pride ourselves at developing customer-specific requirements to offer a high degree of configurability through custom-build options to achieve optimum performance for a broad range of applications.

QuSinus is a spin-off from Heinz Nixdorf Institute at University of Paderborn in Germany, pioneering opto-electronic phase-locked loop for signal generation. The QuSinus PureWave frequency synthesizer features remarkably low phase noise and boasts exceptionally low jitter. The novel frequency synthesizer capitalizes on a mode-locked laser (MLL) as its clock source, utilizing the precision of MLL to outperform competition by orders of magnitude.

The low noise RF/microwave signal generator QuSinus PureWave offers mode-locked-laser frequency stability with an unparalleled internal frequency reference precision. The exceptional frequency stability coupled with low phase noise performance makes the PureWave signal generator the ideal choice for many measurement applications.

At QuSinus, we pride ourselves at developing customer-specific requirements to offer a high degree of configurability through custom-build options to achieve optimum performance for a broad range of applications.

Our service promise

- Need customization? We can develop to your requirements
- Need assistance? We provide personal service, so you actually talk to a person

Contact us

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Die Europäische Union fördert zusammen mit dem Bundesministerium für Wirtschaft und Klimaschutz über den Europäischen Sozialfonds Plus (ESF Plus) das Programm „Existenzgründungen aus der Wissenschaft (EXIST)“ in Deutschland.

Gefördert durch:



Bundesministerium
für Wirtschaft
und Klimaschutz



Kofinanziert von der
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EXIST
Existenzgründungen
aus der Wissenschaft

aufgrund eines Beschlusses
des Deutschen Bundestages