



Tuesday, 21 October 2014 06:52

TDEMI X40 – lowest noise floor at 40 GHz

The worldwide fastest EMI Receivers TDEMI eXtreme (TDEMI X) of GAUSS INSTRUMENTS with a frequency range from 10 Hz – 40 GHz, which is 64000 times faster than a traditional EMI Receiver, now also provides the lowest noise floor in comparison to any EMI Receiver with a range of 40 GHz.

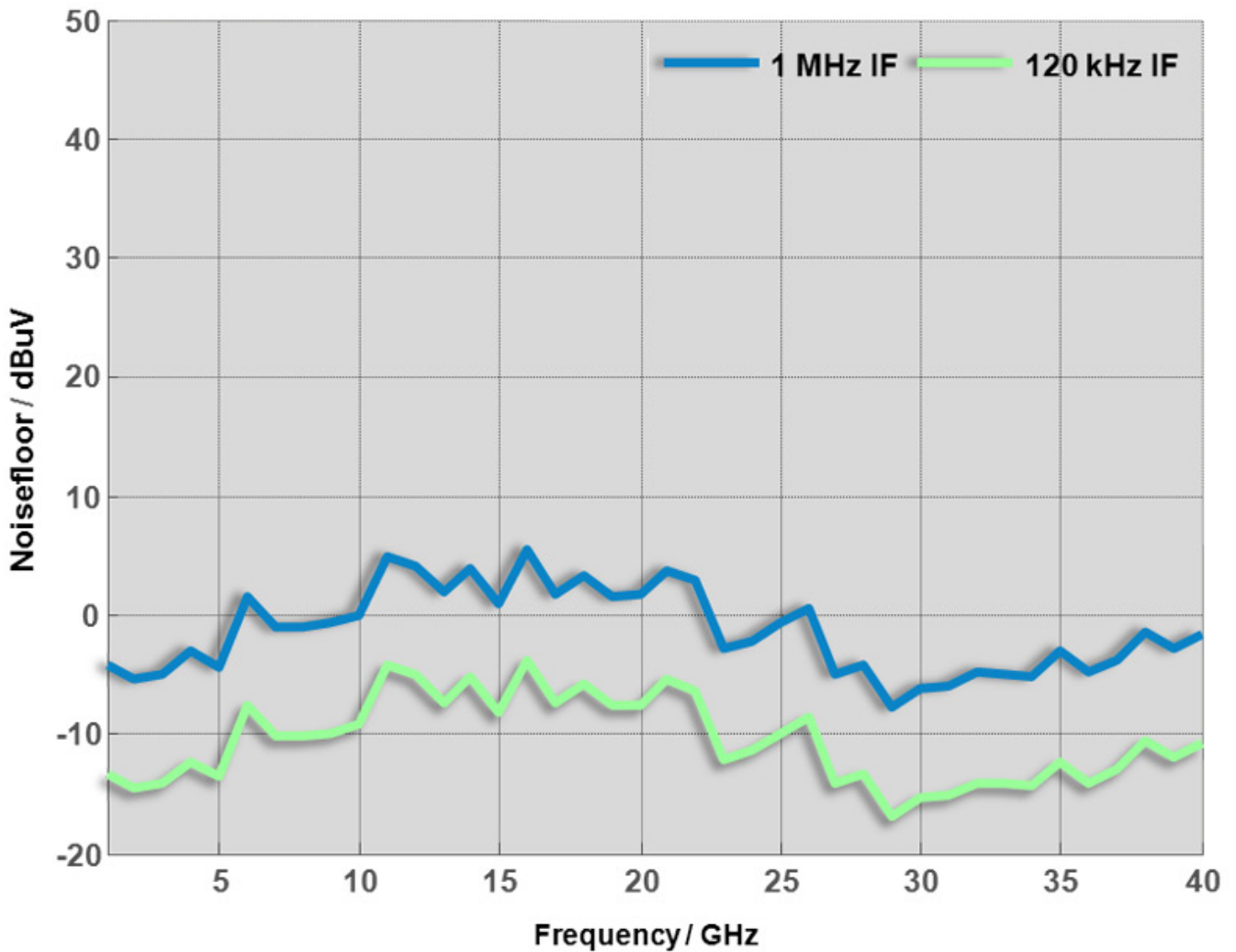


Fig. 1 – Lowest noise floor at 40 GHz



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TDEMI X40 – lowest noise floor at 40 GHz

Due to a new integrated preamplifier solution with preselection protecting the low noise amplifiers (LNA), the TDEMI X40 shows an ultra-low noise floor up to 40 GHz. By an additional option the TDEMI X can now be upgraded by a preselected integrated additional low noise amplifier which improves the noise floor at 40 GHz by more than 20 dB. For example the typical noise floor value of the average noise floor of the TDEMI X40 at 40 GHz is now at $-1.7 \text{ dB}\mu\text{V}$ (average detector, 1 MHz IF-Bandwidth). The following figure shows the typical displayed average noise level within the frequency range from 1 GHz to 40 GHz for the IF-Bandwidth of 1 MHz and 120 kHz.

Further well known functions like e.g. AM/FM audio demodulation as well as new features like e.g. I/Q data analysis completes the multifunctional options of the TDEMI X series.

The TDEMI product family of GAUSS INSTRUMENTS provides a tailored solution for every user, whatever small and compact, ultra mobile or highest performance and a frequency range up to 40 GHz. With additional expandable features the TDEMI becomes the optimal solution for your lab and test center.