AXTAL ADVANCED XTAL PRODUCTS
a Q-TECH Company

FREQUENCY REFERENCE UNITS
GPS-Disciplined OCXOs & Cesium Atomic Clock

Model	**AXGPS5050**	**AXGPS9000**	**AXCS9000**
Technology	GPS-disciplined OCXO		Cesium Atomic Clock - Optically Pumped -
Stability / Phase noise at 10 MHz [dBc/Hz]	1E-11 1 s 1E-11 10 s 1E-11 100 s 6E-12 1E3 s 1E-12 1E4 s 1E-13 1E5 s -100 1 Hz -130 10 Hz -145 100 Hz -150 1 kHz -155 10 kHz -155 100 kHz	1E-11 1 s 1E-11 10 s 1E-11 100 s 6E-12 1E3 s 1E-12 1E4 s 1E-13 1E5 s -110 1 Hz -140 10 Hz -160 100 Hz -165 1 kHz -170 10 kHz -170 100 kHz	3.0E-12 1 s 2.0E-12 10 s 8.0E-13 100 s 2.5E-13 1E3 s 8.0E-14 1E4 s 2.0E-14 1E5 s 1.0E-14 Floor -105 1 Hz -135 10 Hz -154 100 Hz -158 1 kHz -158 10 kHz -158 100 kHz
Features	▪ Compact Miniature GPSDO ▪ Very High Stability ▪ Low Noise ▪ 10 MHz & 1PPS Output ▪ RS-232 Interface / NMEA-0183 ▪ PCB mountable	▪ Very High Stability ▪ Ultra-Low Noise ▪ 10 MHz & 1PPS Output ▪ RS-232 Interface / NMEA-0183 ▪ Available with integrated 10 MHz and 1PPS distribution amplifiers ▪ Cascadable with AXDA9000/9100 distribution amplifiers	▪ Primary Reference Clock (PRC) ▪ Optically pumped Cesium ▪ Long tube life time of 10 years ▪ 5 MHz, 10 MHz and 1PPS Outputs ▪ Standard & High Performance ▪ Cascadable with AXDA9000/9100 distribution amplifiers
Supply	12 V / 3 W	AC 230 V / 10 W	DC 22~75 V AC 220 V / 120 W
Size	50 x 50 x 25 mm THD Package	Slim 19” Rack - 1 HU	19” Rack - 4 HU

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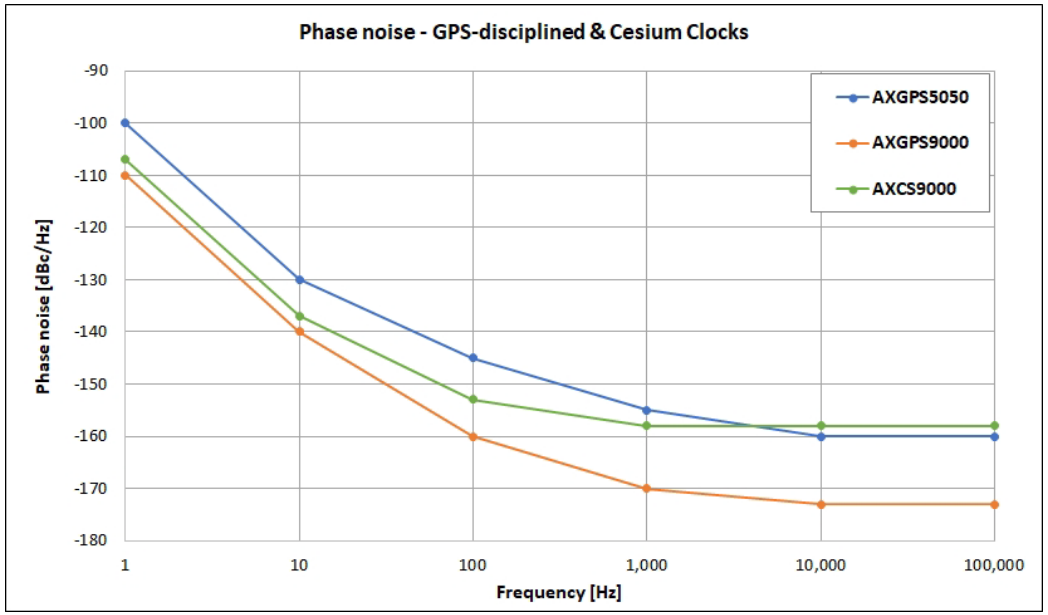
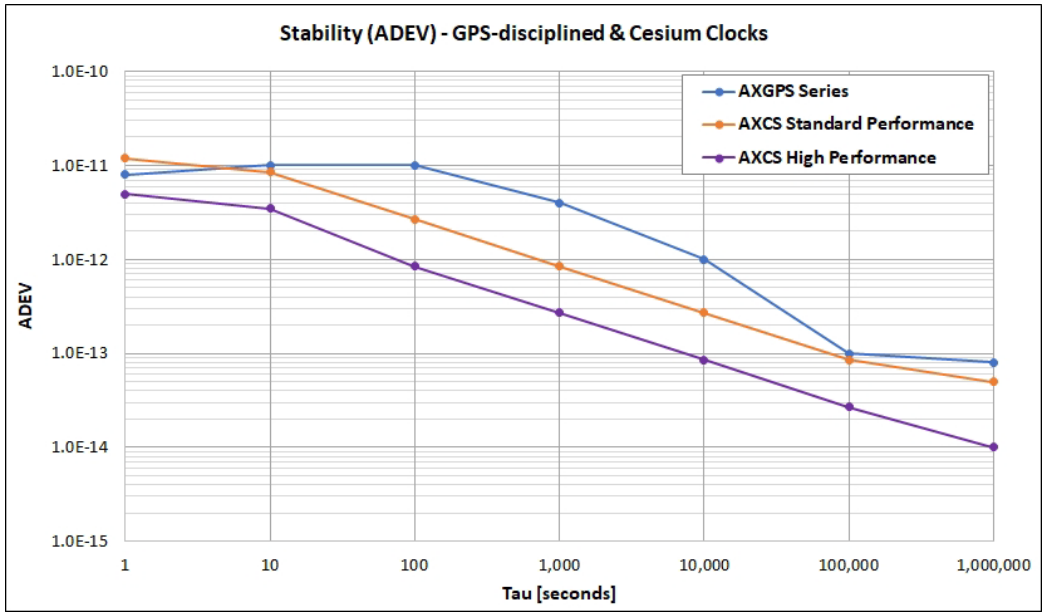
Designed and Manufactured in Germany

GPSDO & Cesium Performance

Phase noise



Stability (ADEV)



See also our
Distribution Amplifiers AXDA9000 Series for 1PPS and 10 MHz distribution
AXPLO10 & AXDA9200-CU for 10 MHz Phase Noise Clean-up

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