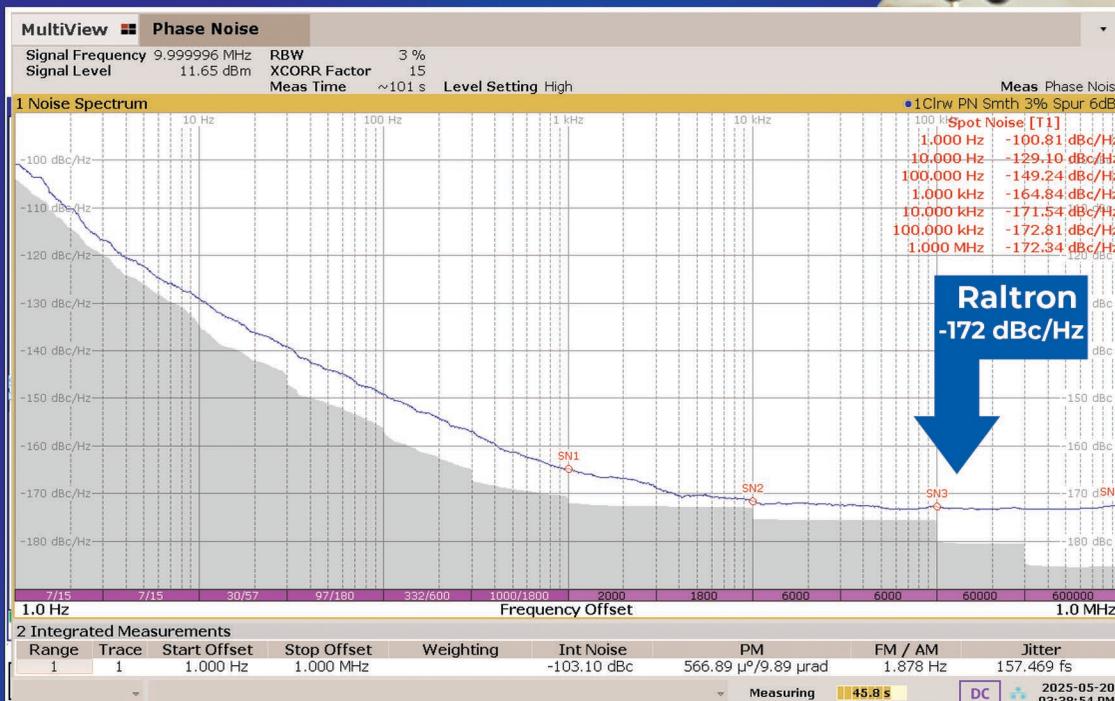


Raltron LEO SPACE OCXO

Raltron's LEO Space OCXOs provide exceptional frequency stability, ultra-low phase noise, and robust thermal performance. Engineered to deliver precise and reliable output over temperature and long-term operation, these OCXOs are ideal for satellite communication payloads, spaceborne synthesizers, precision timing modules, and high-reliability microwave systems.

APPLICATIONS

-  LEO Satellite Communication Payload Frequency Reference
-  Spaceborne PLL/Synthesizer Local Oscillator
-  Telemetry, Tracking and Control
-  GNSS-Based Timing & Navigation Modules



Electrical Parameter

- Frequency 10 MHz
- Type Output Sinewave
- Output Level (typ) 10dBm
- Harmonics -30dBc
- Spurs -80dBc
- Load Impedance 50Ω
- Frequency Control Range ±0.5~±1.0ppm
- Frequency Tuning Voltage Range 0~5 Vdc
- Frequency Control Input Impedance 100kΩ
- Frequency Stability over Temp.(-20~+70°C) ±10ppb
- Initial Frequency Tolerance ±100ppb
- Aging (Per year) ±50ppb
- Phase Noise (typ) @10Hz -135 dBc/Hz
- Phase Noise (typ) @100Hz -155 dBc/Hz
- Phase Noise (typ) @1kHz -165 dBc/Hz
- Phase Noise (typ) @10kHz -170 dBc/Hz
- Phase Noise (typ) @100kHz -170 dBc/Hz
- Phase Noise (typ) @1MHz -170 dBc/Hz
- Supply Voltage (5%) 5 Vdc
- Current Consumption @Steady State 400mA
- @Warm Up 800mA
- G-Sensitivity (Each Axis@2kHz) 0.2~1ppb/G
- Radiation Hardened (TID, SEE) Per customer spec
- Dimensions 36 x 27mm

Raltron OX3000 Series

- Frequency 10 MHz
- Type Output Sinewave
- Output Level (typ) 10dBm
- Harmonics -30dBc
- Spurs -80dBc
- Load Impedance 50Ω
- Frequency Control Range ±0.5~±1.0ppm
- Frequency Tuning Voltage Range 0~5 Vdc
- Frequency Control Input Impedance 100kΩ
- Frequency Stability over Temp.(-20~+70°C) ±10ppb
- Initial Frequency Tolerance ±100ppb
- Aging (Per year) ±50ppb
- Phase Noise (typ) @10Hz -135 dBc/Hz
- Phase Noise (typ) @100Hz -155 dBc/Hz
- Phase Noise (typ) @1kHz -165 dBc/Hz
- Phase Noise (typ) @10kHz -170 dBc/Hz
- Phase Noise (typ) @100kHz -170 dBc/Hz
- Phase Noise (typ) @1MHz -170 dBc/Hz
- Supply Voltage (5%) 5 Vdc
- Current Consumption @Steady State 400mA
- @Warm Up 800mA
- G-Sensitivity (Each Axis@2kHz) 0.2~1ppb/G
- Radiation Hardened (TID, SEE) Per customer spec
- Dimensions 36 x 27mm

Raltron OX8000 Series

- Frequency 100 MHz
- Type Output Sinewave
- Output Level (typ) 10dBm
- Harmonics -30dBc
- Spurs -80dBc
- Load Impedance 50Ω
- Frequency Control Range ±1.0~±2.0ppm
- Frequency Tuning Voltage Range 0~5 Vdc
- Frequency Control Input Impedance 100kΩ
- Frequency Stability over Temp.(-20~+70°C) ±20ppb
- Initial Frequency Tolerance ±100ppb
- Aging (Per year) ±500ppb
- Phase Noise (typ) @10Hz -100 dBc/Hz
- Phase Noise (typ) @100Hz -130 dBc/Hz
- Phase Noise (typ) @1kHz -155 dBc/Hz
- Phase Noise (typ) @10kHz -168 dBc/Hz
- Phase Noise (typ) @100kHz -170 dBc/Hz
- Phase Noise (typ) @1MHz -174 dBc/Hz
- Supply Voltage (5%) 5 Vdc
- Current Consumption @Steady State 400mA
- @Warm Up 650mA
- G-Sensitivity (Each Axis@2kHz) 0.2~1ppb/G
- Radiation Hardened (TID, SEE) Per customer spec
- Dimensions 25 x 25mm