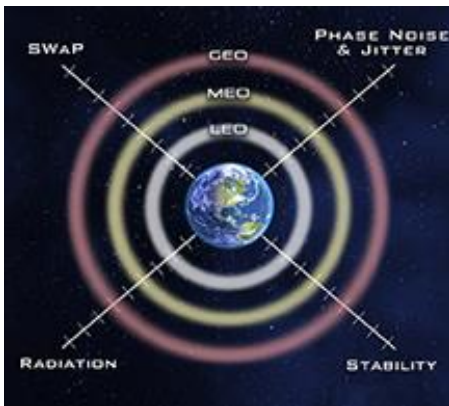




Q-Tech Paper Details Requirements for Crystal Oscillators in Space

White paper traces space applications from the “space race” era to today; reviews – by orbit – the operational and physical requirements of deep-space vehicles and geostationary (GEO) satellites, with a focus on rapidly growing “new space” low-earth orbit (LEO) applications



Cypress, CA—September 15, 2020—[Q-Tech Corporation](#), the world’s leading supplier of crystal oscillators for space, military, avionics and high-temperature applications, announces the publication of an informative white paper providing a detailed review of the key characteristics of crystal oscillators utilized in space satellites. The paper addresses specific applications, including physical and operational requirements and other details. It also provides oscillator selection criteria partitioned into four key areas: radiation tolerance; stability; phase noise and jitter; and size, weight and power (SWaP) – each in relation to the satellite’s orbital location, from low-earth orbit (LEO), medium-earth orbit (MEO) to geostationary (GEO).

[\[Click on photo to download hi-res JPG\]](#)

The nine-page white paper, “New Space Applications Add to Mix of Space-Qualified Crystal Oscillators,” begins with a brief overview of the evolution of earth-orbiting satellites, from Sputnik and the early “space race” to the developments over the decades since. With the current population of earth-orbiting satellites expected to grow from 2,200 (in May 2020) to over 50,000 in the coming decade, the paper offers a timely resource on these rapidly expanding “new space” satellite constellations.

“The dramatic increase in space satellites, particularly in low-earth orbit communications clusters, is providing both exceptional opportunities – and challenges – for space-qualified component suppliers,” said Scott Sentz, Q-Tech’s director of sales and marketing. “Q-Tech remains at the very forefront of quartz crystal oscillator design. We are happy to offer a white paper that informs designers about the stringent performance and reliability requirements of these new space LEO applications, as well as deeper-space military and commercial applications.”

Availability: [Download Now](#)

About Q-Tech Corporation

[Q-Tech Corporation](#) was founded in 1972 with the objective of providing state-of-the-art crystal clock oscillators and frequency control solutions for companies with demanding applications. As the leading U.S. manufacturer of qualified products to MIL-PRF-55310 as well as ultra-high reliability standards such as Aerospace Corporation TOR (GPS III) and NASA GSFC specifications, Q-Tech proudly services the military, aerospace, down-hole and deep space industries. Q-Tech is certified to the AS9100 and ISO 9001 Quality Management Systems. The Company maintains a global presence with sales capabilities throughout North America, Europe, and Asia.

Editorial Contact

Scott Sentz, Director, Sales & Marketing
Q-Tech Corporation
+1.310.836.7900 ext.110
scott.sentz@q-tech.com

Agency Contact:

Greg Evans, P.E.
WelComm, Inc.
858.633.1911
greg@welcomm.com