



REF TEK® Introduces Posthole Seismometer, Expanding the Successful Colt Product Line into Direct Burial and Posthole Applications

PUBLISHED

January 12, 2023

REF TEK introduced today its REF TEK Colt™-PH broadband seismometer, a follow on to the portable Colt Broadband Seismometer released in 2018. The Colt series provides high-quality data for scientists and academics using seismic networks to conduct earth movement studies

Working in combination with a REF TEK Wrangler or third-party seismic data recorder, the REF TEK Colt-PH sensor enables scientific and academic researchers to study local, regional and global seismicity to learn more about the physics of earthquakes and to gain a deeper understanding of plate tectonics.

The Colt-PH allows for weak motion science to reliably go beneath ground level and measure “beneath the noise” reducing the environmental noise levels significantly, especially on horizontal channels. Vault seismometers suffer from a phenomenon frequently referred to as “surface tilt” which can impact the long period noise measured by horizontal channels of a surface seismometer. The Colt-PH solves this problem with a package designed to be buried below the earth surface without an expensive borehole. The Colt-PH’s stainless steel IP68 case, which is rated to withstand water pressure at 100 m depth, also solves the problem of flooded vaults damaging equipment. Additionally, tilt tolerance is improved over the colt to +/- 5 degrees, making the instrument easier and more tolerant to deploy.

The Colt-PH seismometer is rugged in transport as well. During transit, a shock resistant housing and robust automatic mass locking system protects the internal components. In addition, the Colt-PH low-power consumption means fewer batteries are required for deployments, reducing station footprints.



The REF TEK Colt-PH's exceptional performance makes the sensor ideal for a wide range of seismic monitoring applications. The seismometer operates with low self-noise and features a large dynamic range to enable the sensor to quietly observe and measure high-quality ground motion data. The Colt-PH maintains the industry standard for low noise performance in a compact form factor.

"Researchers require compact, portable sensors that can survive in a direct-burial environment and produce quality data performance. The REF TEK Colt-PH is an economical sensor with industry-leading performance in its size category," said Derek Inglis, President of Reftek Systems Inc.

The REF TEK Colt-PH is available now through the Reftek Systems Distribution Channel. To learn more, visit: www.reftek.com.

About REF TEK

REF TEK products have been successfully used in a wide variety of seismological applications and research studies across the globe for study of earthquakes and aftershocks, assessment of fault-line tension, and global earthquake analysis. The company was started in 1975 and made its first product for seismologists in 1981.