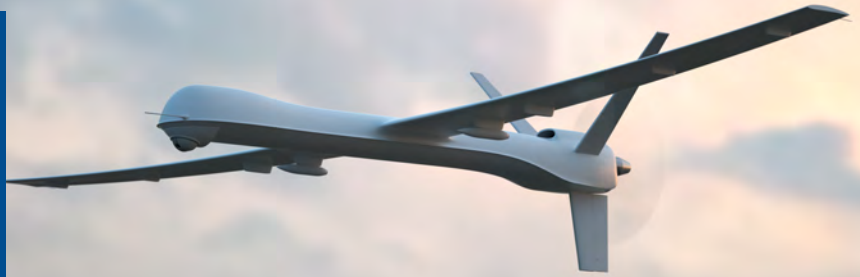


Viewing the World from the Clouds: Taitien Electronics Takes UAV Vision to New Heights



FEATURES

- Designed for Harsh Environments: Up to -40°C to $+125^{\circ}\text{C}$
- Ultra Low G-Sensitivity : 0.1 ppb/g
- Excellent hold over stability: $< 10^{-12}$ in frequency
- Low phase noise: -163 dBc/Hz @ 1 KHz
- 24 Hours Holdover $< \pm 1.5$ us
- IPPS GPS Disciplined < 30 ns

APPLICATIONS

- Automated flight control
- Flight management and health monitoring
- Network control
- High-speed data transmission
- GNSS receiver
- Flight sensors, IMU and gyroscopes
- Navigation
- Camera and video sensors
- Communication
- Collision avoidance
- Weather radar
- Engine propulsion system
- Landing system control

As a leader in frequency component technology, Taitien Electronics has always been at the forefront of technological advancement. Our latest products elevate the image quality and flight stability of unmanned aerial vehicles (UAVs) to new heights, setting a new milestone for the UAV industry.

In recent years, the UAV market has experienced remarkable growth. From consumer entertainment to business and scientific research, the demands for image quality and flight stability have been increasing. Taitien Electronics' advanced crystal oscillators provide precise timing solutions for various UAV functions such as wireless communication, microprocessing, Bluetooth/Wi-Fi, time capture, camera, sensors, and navigation.

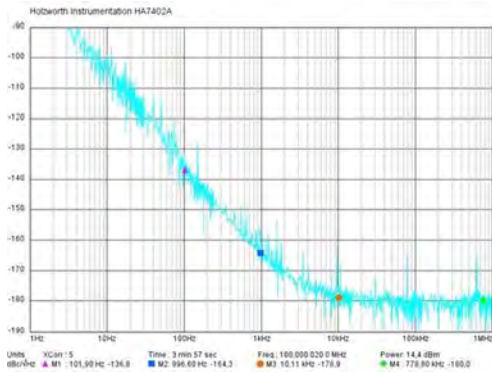
In most outdoor application scenarios, GPS and wireless transmission from the UAV to the ground are particularly important because accurate time and signal are needed to calculate longitude and latitude. Taitien Electronics' temperature-compensated crystal oscillators (TCXOs) meet these requirements and comply with environmental conditions across various working scenarios.

For high-end UAVs that rely on the Global Navigation Satellite System (GNSS), our Oven Controlled Crystal Oscillators (OCXOs) are the optimal choice. They provide stable and accurate signals, low noise floor, low phase noise, and high-frequency stability.

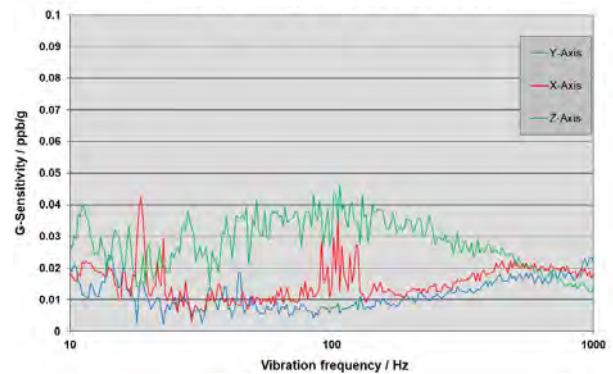
During the takeoff, cruising, and landing processes of UAVs, operational stability, navigation, and communication must be maintained even when faced with severe turbulence and adverse conditions. Taitien Electronics' full range of crystal oscillators can deliver stable operation, precise navigation, and certain communication even under extreme temperature ranges and severe vibration, demonstrating its high flexibility and superior performance.



Phase Noise

Phase Noise NA-100M-6800 Series


G-Sensitivity

G-Sensitivity NI-100M-6700 Series


Product line up

Series	Type		Frequency Range	Key Features
Quartz Crystal	XD 2.0 x 1.2 mm		32.768 KHz	Tolerance ± 20 ppm
	XZ 2.05 x 1.65 mm	 	16 to 60 MHz	± 15 ppm @ -40°C to $+85^{\circ}\text{C}$ ± 30 ppm @ -40°C to $+125^{\circ}\text{C}$
Crystal Oscillator	O3 1.6 x 1.2 mm		3 to 60 MHz	CMOS Phase Jitter : 0.4 ps (typ.) ± 20 ppm @ -40°C to $+85^{\circ}\text{C}$ ± 50 ppm @ -40°C to $+105^{\circ}\text{C}$
	OZ-D 2.05 x 1.65 mm	 	32.768 KHz	CMOS 1.4 μ A 1.5/1.8V ± 25 ppm @ -40°C to $+105^{\circ}\text{C}$
VCTCXO/TCXO	TZ 2.0 x 1.6 mm		10 to 52 MHz	Clipped Sine Wave -135 dBc/Hz @ 1kHz ± 0.5 ppm @ -40°C to $+85^{\circ}\text{C}$
	TT-L 7.0 x 5.0 mm		10 to 52 MHz	CMOS/Clipped Sine Wave -149 dBc/Hz @ 1kHz ± 0.5 ppm @ -40°C to $+85^{\circ}\text{C}$ 0.3 ppb/g
OCXO	NI-100M-6700 36.3 x 27.2 mm		100 MHz	Sine Wave -155 dBc/Hz @ 1kHz ± 100 ppb @ -40°C to $+85^{\circ}\text{C}$ 0.1 ppb/g
	NA-100M-6800 25.4 x 25.4 mm		100 MHz	Sine Wave -163 dBc/Hz @ 1kHz ± 20 ppb @ -20°C to $+70^{\circ}\text{C}$
Timing Module	GT-11 25.4 x 25.4 mm		10 MHz	CMOS $< 10^{-12}$ in frequency IPPS GPS Disciplined < 75 ns
	DT-5151 50.8 x 50.8 mm		5, 10 MHz	CMOS $< 10^{-12}$ in frequency IPPS GPS Disciplined < 30 ns 24 Hours Holdover < 1.5 μ s

