

# Applications in Military & Aerospace

Military communications are by nature required to be highly secure and extremely reliable. Therefore very specialised time codes are necessary to ensure data stability and to provide adequate protection from attempts to intercept data.

- **Secure Communications**
- **Range Timing**
- **Radar Event Tagging**
- **Command & Control**
- **Security**
- **Satellite Ground Stations**
- **Space Centre Launch Systems**



Secure communications systems also require accurate and stable frequency references to ensure that either **spread-spectrum or frequency-hopping radio systems** remain locked when used in anti-jam mode. Precise time and frequency standards are required to meet these exacting communication requirements.

The ground segments of space systems use precise time to trigger mission-critical events, including launch, booster rocket firing and re-entry. Time is also used to tag telemetry data for subsequent analysis.

Similarly, Military and Aerospace test ranges use time for **telemetry data tagging**. The profusion of differing types of telemetry equipment and the wide use of legacy systems in this industry means that most ranges use time in a multiplicity of formats, or timecodes.

The **security services** also use accurate time, in the form of timecodes, to tag intercepted voice and data traffic. Known colloquially as XR3 and 2137 these timecodes are similar in form to the IRIG and NASA codes but differ in speed and code.

**Our highly versatile products offer a cost effective means of providing accurate time to a complex, multi-vendor IT system. Due to the product flexibility, we can provide solutions whatever your requirement.**



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