

# Airport Timing Systems

## A Synchronised Approach

The efficient running of an airport relies heavily on precision timing; Flight Scheduling, Air Traffic Control, Check-in and Baggage Handling and Passenger Information Displays all need feeds from a centralised time system to ensure everything runs efficiently.

### Safety

Time synchronisation is critical from a safety point of view. Precise event tagging of critical data results in a traceable audit trail. This audit trail is essential for pinpointing the specific order in which events occurred, a critical concern for analysing potential or actual safety issues.



**Typical airport systems** include central computers, security systems, passenger & flight information, baggage, CCTV and telephone systems to name a few. All of these systems are normally supplied by different vendors, and will have an array of different connection interfaces. So how do we achieve thorough integration so that all these different systems are displaying the same time? And how do we know that the correct time is being used?

The answer is to start with a traceable and trusted time source, such as GPS, to synchronise the internal clock in the master timing system. GPS uses a network of 24 satellites that produce extremely accurate time information. The internal clock, or oscillator, provides stability to the overall system if the GPS signal is interrupted for any reason.

The time signal is then converted into various formats such as serial, parallel, NTP and industry-standard time codes for instance IRIG-B, and AFNOR. Many standard systems are unable to cope with a multi-vendor requirement, where various different outputs are required.



We have overcome this by offering modular-platform timing systems together with a wide range of output modules to interface with whatever systems our customers require.

To overcome any potential internal timing errors, Time & Frequency Solutions recommend the use of a 'dual-redundant system' whereby a changeover unit links two timing systems with the ability to switch the signal from one to the other if a failure occurs.



**So, what does Time & Frequency Solutions offer over and above other precision timing companies?**

### Flexibility

### Compatibility

### Reliability

- We provide an economic solution to multi-vendor requirement
- We tailor our systems to suit yours
- We can provide a solution to any application
- No system too large, small, simple or obscure
- Over 30 years in timing industry
- Extensive airport experience



**Please contact us if you require any further information about how our products are used in airports.**

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