

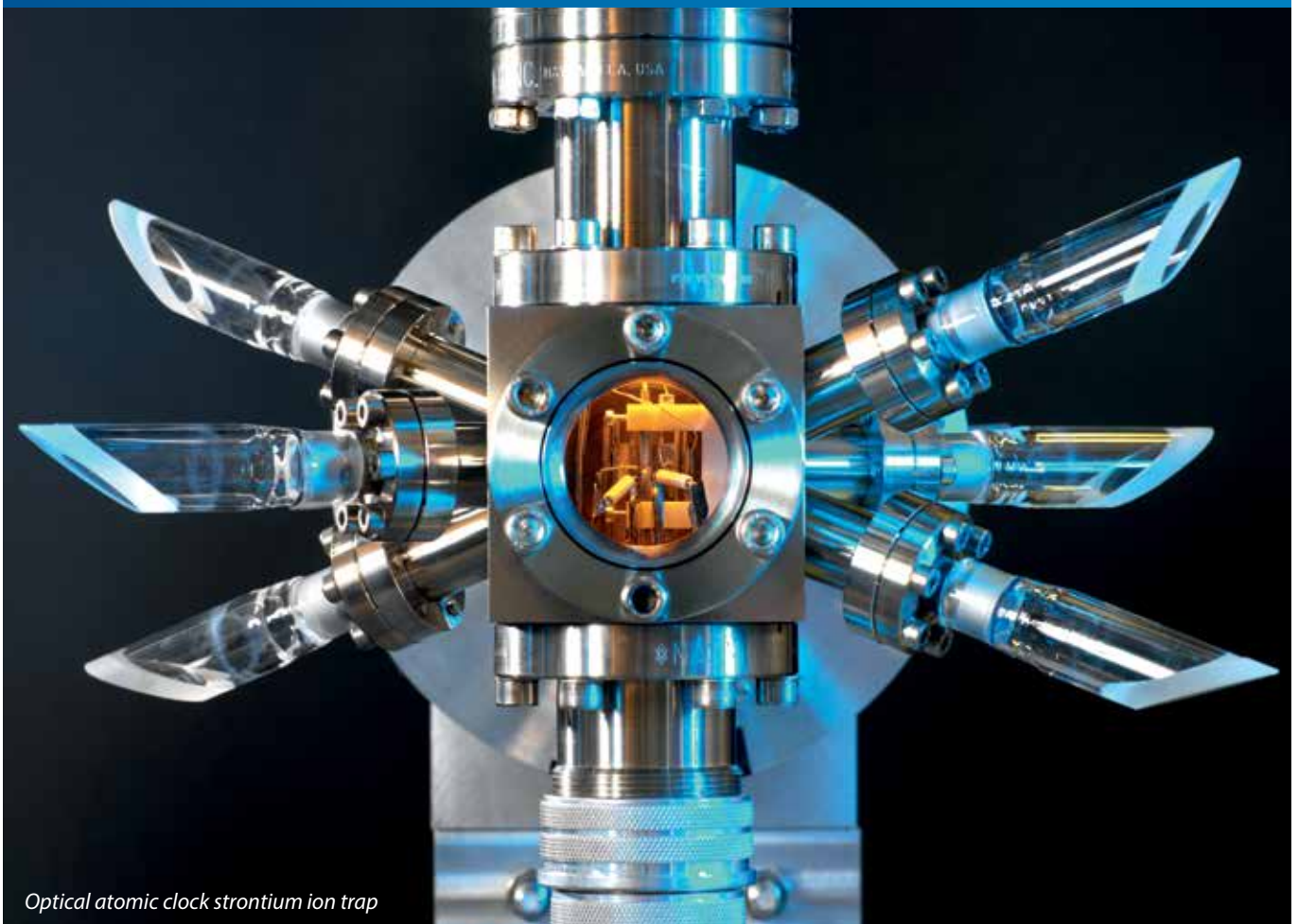
NPLTime[®] *Trusted time directly from the source*

- ▶ Traceable to UTC
- ▶ Certified at the User
- ▶ Resilient
- ▶ Synchronisation

NPLTime[®] is a precise time signal, directly traceable to Coordinated Universal Time (UTC), and certified at the user, providing a trusted 'common clock' with absolute time in any location.

NPLTime[®] completely eliminates reliance on GPS and offers a resilient service by removing susceptibility to jamming, spoofing, urban canyon effects and solar storms.

NPLTime[®] is the latest service from the National Physical Laboratory (NPL), home of the UK's National Timescale, UTC(NPL), and the caesium fountain *NPL CsF2*, a primary frequency standard accurate to within 1 second in 158 million years.



Optical atomic clock strontium ion trap

Key benefits

- ▶ Directly traceable and certified to UTC at the point of provision, not the source
- ▶ A precision timing distribution solution, with no reliance on GPS or internet time
- ▶ Eliminates susceptibility to GPS jamming, spoofing, urban canyon effects and solar storms
- ▶ Uses dedicated fibre optic links, ensuring maximum resilience and security
- ▶ Provides enhanced synchronisation
- ▶ No roof access required
- ▶ Built in redundancy

Resilient, precision timing is vital for managing complex and varied technology platforms and increasing volumes of data. NPLTime® offers new opportunities for data and co-location centres and exchanges to provide customers with a premium service with certified timing traceability direct to UTC.

Low latency monitoring

NPLTime® provides an accurate, certified baseline from which latency can be measured and optimised. The low jitter certified signal offers the capability to measure latencies within hardware platforms and LANs. Having NPLTime® at multiple locations brings the capability of a common clock source to the user, allowing latency to be measured uni-directionally across the WAN and network performance optimised.

High frequency trading platforms

NPLTime® offers a unique opportunity to implement a low uncertainty, fully traceable time signal, helping to meet the ever-increasing need for speed in high-frequency trading.

Regulatory monitoring

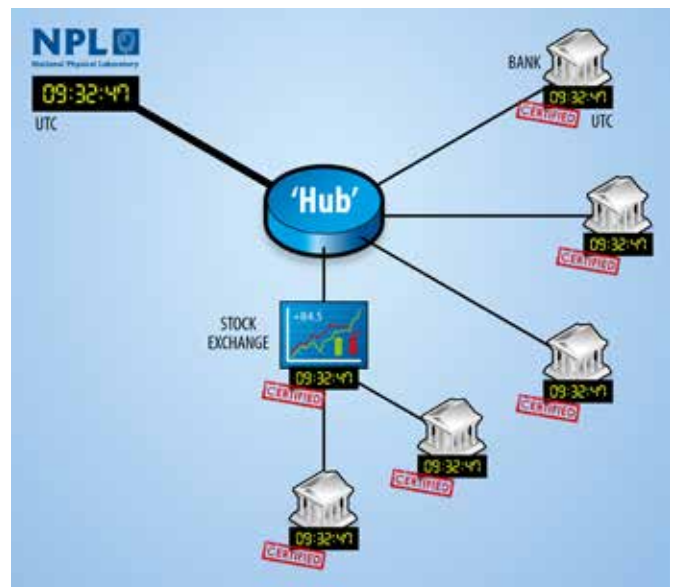
The NPLTime® traceability chain to UTC is direct to UTC(NPL), and certified at the user, rather than the source, providing UTC timestamping critical for forensics and audit purposes, and a reference timeline to any series of events.

Time synchronisation

NPLTime® is a managed service maintained remotely from the user's premises and can be rolled out regionally, nationally or globally across a distributed business. The same level of service is offered in each location, ensuring an organisation has full transparency and understanding of events, wherever they take place.

Delivery

NPLTime® is delivered via dark fibre to a hub in London Docklands. Our authorised distributors provide the time on managed links from this hub to a managed end point device at the client's rack/premises, where the time is certified and accessible via a number of different interface options.



Contact details	Further information
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