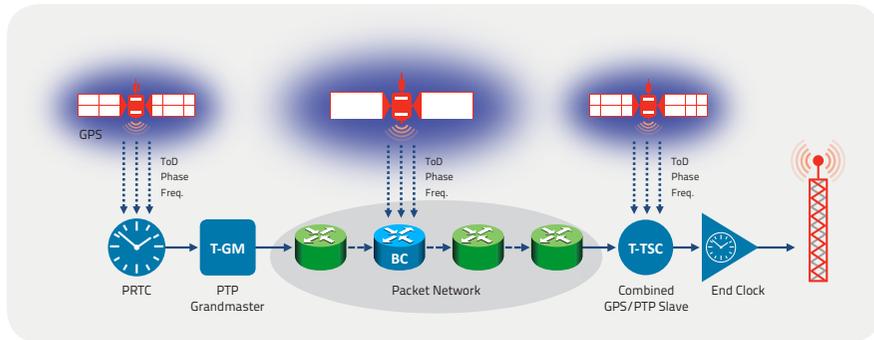Calnex Paragon-X: Advanced ToD/GPS Emulation (Option 230)

Prove ToD and PTP performance with one box

Paragon-X now comes with Time of Day (**ToD**), phase, frequency and PTP stimulus and measurement for precise timing analysis

Feature Summary

- Easy graphical analysis and comparison of timing performance
- Unique emulation of GPS ToD (CCSA and NMEA)
- Complete control of ToD message fields
- Fully integrated test bed aligns test stimulus and measurement for increased accuracy and repeatability
- ToD combines with Paragon-X's PTP and SyncE options for fully integrated test

New networks, new challenges

Assisted Partial Timing Support (APTS) transfers time/phase using both PTP and GPS. Now you can test network clocks for ToD and PTP performance and compliance to the latest ITU-T standards.

Generate

ToD, phase, frequency, plus packet timing

Measure
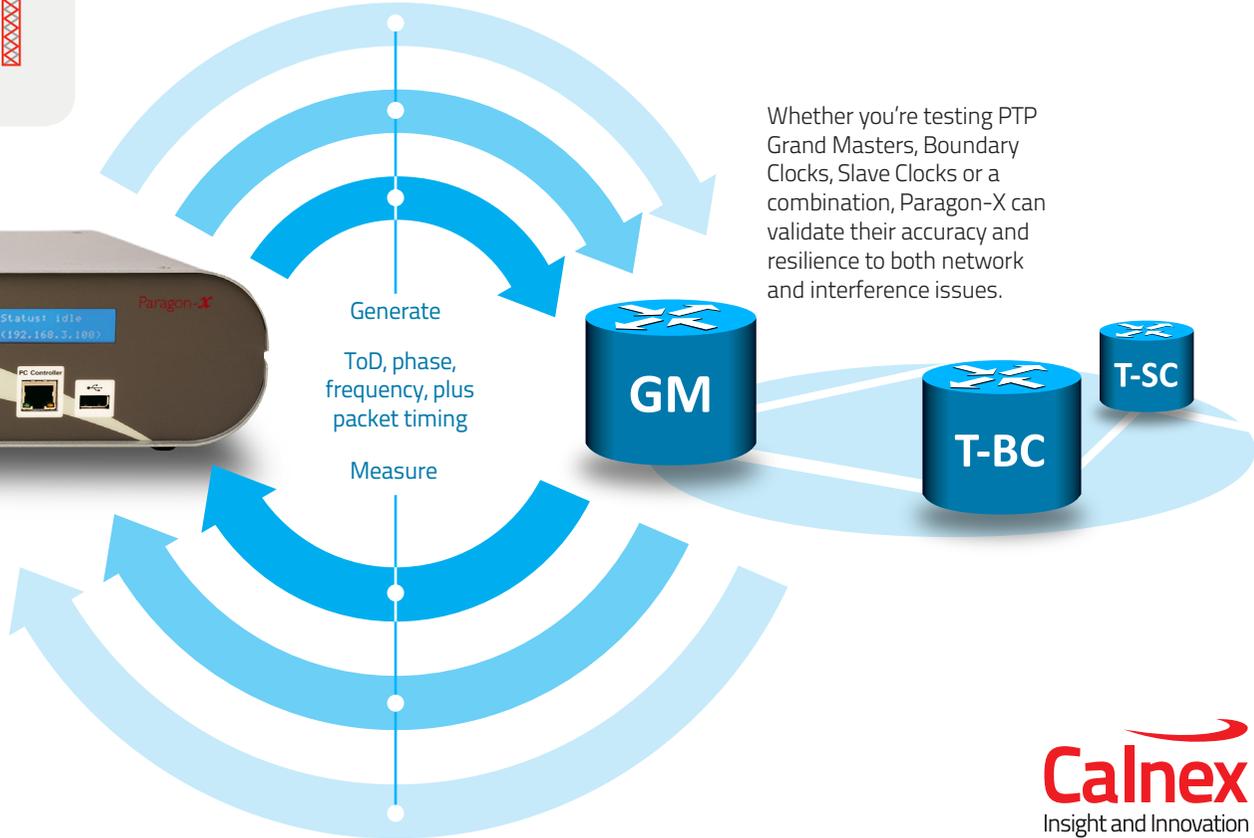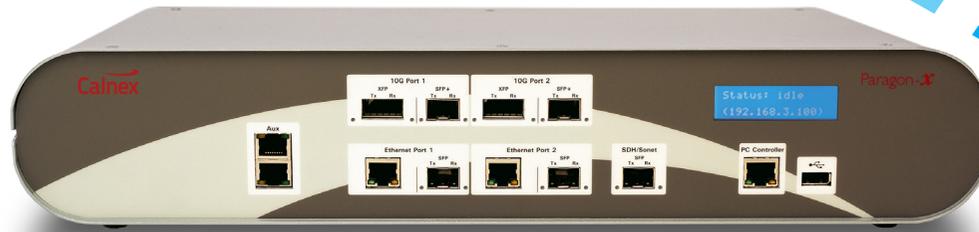
Whether you're testing PTP Grand Masters, Boundary Clocks, Slave Clocks or a combination, Paragon-X can validate their accuracy and resilience to both network and interference issues.

Evaluate the performance of Boundary Clocks and Slave Clocks including:

- Timing recovery under various network PDV conditions
- Response to ToD events
- Switching between timing sources
- Performance when switching between timing sources

Verify Grand Master timing accuracy:

- Measure PTP output vs. ToD, Phase and Frequency reference
- Configure and change key ToD fields and see how the GM responds
- Confirm 1588 Clock Class matches ToD
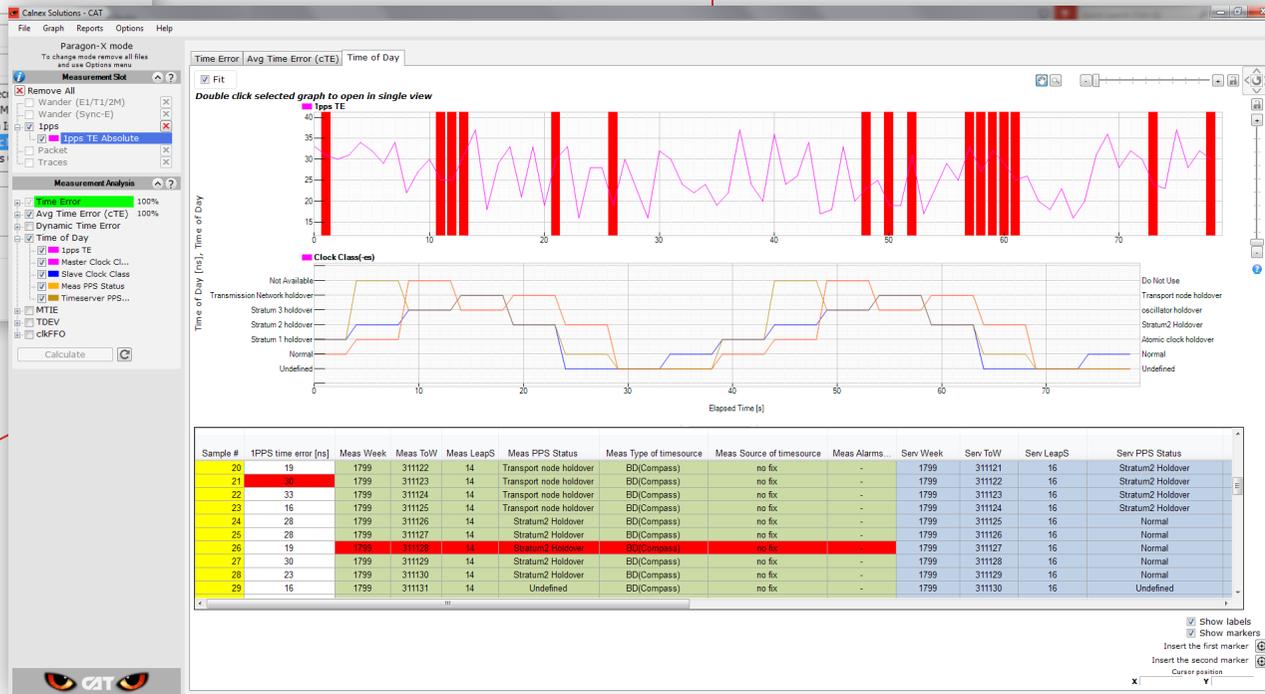- Compare Leap Second (UTC offset) in 1588 with generated ToD

Calnex
Insight and Innovation

Generate • Decode • Measure
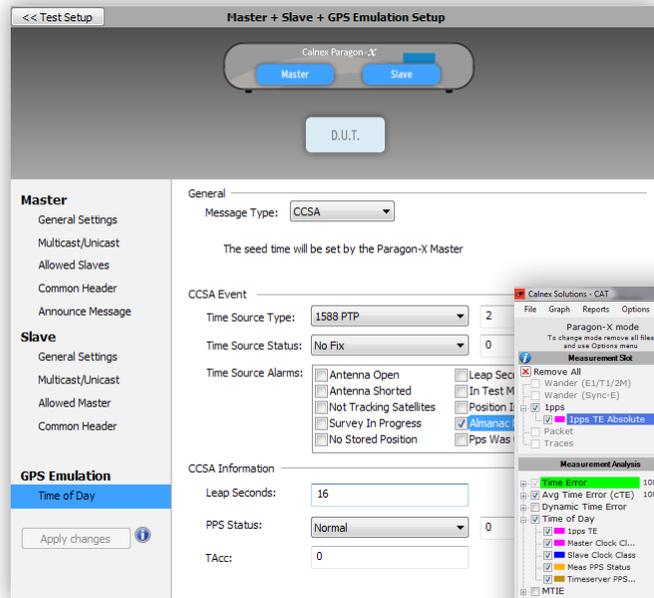
Generate industry standard event and information messages with full control of message format, time source alarms, leap second indicator, PPS status and time accuracy.

Graphical analysis of major time error metrics lets you instantly see device performance and response to stimulus for faster evaluation and troubleshooting.

Full decode of significant fields in ToD messages lets you rapidly identify and pin down timing errors and alarms.

Align ToD results with other simultaneous measurements for complete performance analysis.

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