



# Fiber Optic Testing for Data Centers

Measure latency and length with picosecond precision

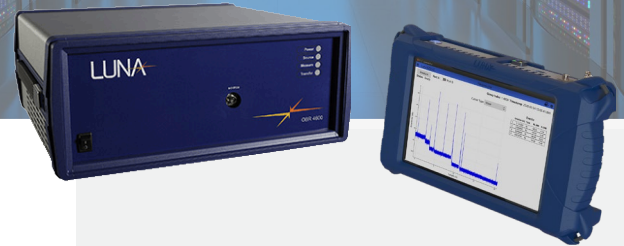
Luna's test systems can quickly verify optical path length and latency with unmatched accuracy and precision, making them ideal for financial data centers and other high-performance networks.

## Ultra-High Spatial Resolution and No "Dead Zones"

Unlike optical time-domain reflectometers (OTDRs), Luna's OBRs feature no "dead zones", no launch cable requirements and sampling resolutions down to 10 microns.

## Troubleshoot and Diagnose Networks

Identify, measure and locate individual loss events, such as connectors, bad splices, macro-bends and breaks with backscatter-level sensitivity and industry-leading dynamic range.



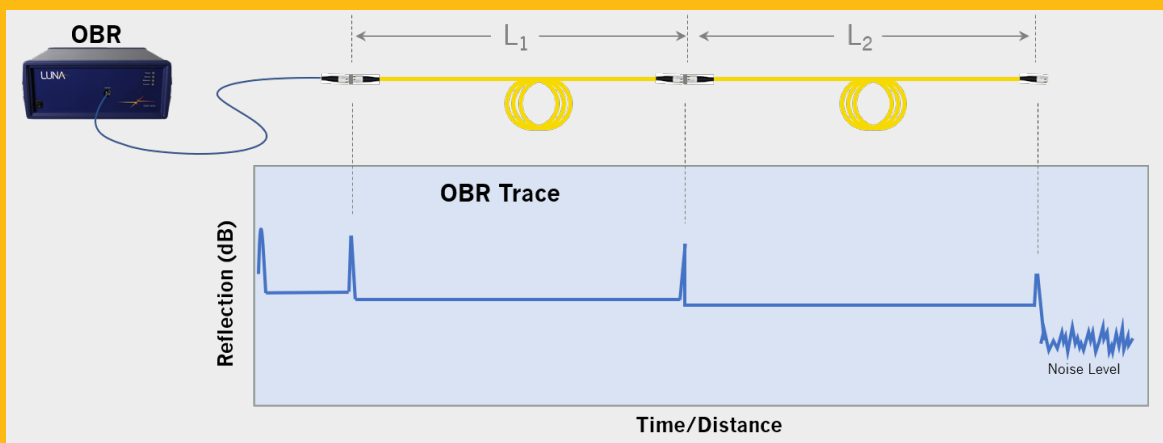
## Applications

- Latency verification for high frequency trading applications
- Link length measurement
- Network diagnostics and troubleshooting
- Manufacturing test of fiber optic assemblies
- Characterize optical components and modules

## Measuring Latency and Length with Optical Backscatter Reflectometry (OBR)

Luna's OBR systems scan a network and measure reflections with ultra-high sensitivity and spatial resolution. Reflective events in the network, such as connectors, bad splices, and macro-bends are detected and quantified.

The OBR's industry-leading spatial resolution provides very precise measurements of the time, or distance, between reflection events. For example, the OBR 4600 will scan a 2 km network with a sampling resolution of 1 mm, corresponding to about 5 picoseconds.



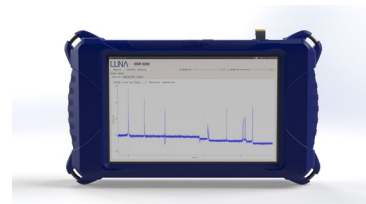
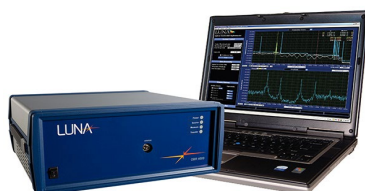


## Fiber Optic Test Solutions for the Data Center

Luna's family of advanced optical test and measurement OBR products are based on optical frequency domain reflectometry (OFDR) and deliver industry leading spatial resolution, dynamic range and speed.

### OBR 4600

### OBR 6200



<b>Wavelength band</b>	4600: C & L (1525 - 1610 nm) 4613: O (1270 - 1340 nm)	C (1542 - 1552 nm)
<b>Max measurement length</b>	Up to 2000 m	6225: 100 m 6235: 200 m*
<b>Sampling resolution</b>	0.010 mm @ 30 m length mode 1 mm @ 2000 m length mode	0.20 mm @ 100 m 0.40 mm @ 200 m*
<b>Sensitivity</b>	-140 dB	-129 dB
<b>Return loss (RL) dynamic range</b>	80 dB	70 dB
<b>Distributed loss measurements (IL &amp; RL) versus length</b>	✓	✓
<b>Spectral analysis</b>	✓	-
<b>Additional features</b>	Phase (GD) measurements Polarization state tracking	Touchscreen GUI Portable, battery-powered unit

\*Contact Luna for availability of OBR 6235 and longer measurement lengths for the portable OBR 6200 Series