

LINE LASER SYSTEMS



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On-Trak Photonics is a U.S.-based leader in precision alignment and optical measurement technologies, specializing in Position Sensing Detector (PSD) systems for the photonics industry. Their solutions are designed for real-time, high-resolution position feedback across a wide range of optical and laser-based applications.

Product offering

Laser Alignment System (OT-7000)



Alignment Laser System (OT-4040)



Laser Alignment System (OT-7000)



Now, the most powerful way to measure alignment at distances up to 300 feet is more convenient and flexible than ever. On-Trak Photonics' OT-7000 Laser Alignment System provides an autocentering and wireless solution for performing real-time measurement of multiple targets along a single reference laser line.



Dynamically monitor work as it progresses. The OT-7000 displays X-Y deviation of each measurement target simultaneously-over your Windows based computer, at the RF controller module, or via LED displays located on each target's dedicated CPU.

Used by leading aircraft manufacturers, shipbuilders and the automotive industry, On-Trak Laser Alignment technology is proven to streamline efficiency and significantly reduce man hours. The OT-7000, with its auto-align and wireless capability, will only boost this productivity further.

Loading stress and thermal changes during the manufacturing process can cause conventional alignment systems to move out of center on the reference target. The OT-7000 compensates for this with an automatic feedback loop that constantly monitors and re-centers the laser via internal motion controllers. User-programmable settings enable you to adjust centering sensitivity levels and feedback sampling rates. Store these values into memory for future recall.

No more cabling hassles-tangling, storage, damage, routing headaches, etc. The OT-7000's wireless design makes it easy to instantly add or remove measurement targets anywhere along the laser line. RF spread-spectrum technology (902-928 MHz) provides rock-solid wireless communications between key components.

Collect and process measurement data with your Windows-based computer. Beam-Trak 7000 software displays X-Y deviation of all targets, enabling you to dynamically monitor work in progress. 0.001-Inch Resolution At 300 Feet. Optimize precision and gain a greater measure of confidence. The OT-7000 provides 0.001-inch resolution at distances up to 300 feet. A third generation fiber-coupled laser diode delivery system ensures exceptional beam quality over long distances.

Key Advantages:

- Cost Effective
- Ultra Precise
- Real-Time Feedback
- Faster Measurement
- Maximizes Range
- Simultaneous Measurement
- Data Analysis

Applications include a broad range of alignment and measurement tasks, such as shaft, accelerator, assembly line, bore, catapult, engine and engine mount, escalator, fixture, machine tool, propeller, rail, roller, spindle, surface, and turbine alignment. The system also supports precision straightness, flatness, and linear measurements, along with machine leveling and research & development applications.

For more information, simply complete the [contact form](#), and a member of our team will be in touch shortly.

Alignment Laser System (OT-4040)



Introducing an easy, powerful way to perform accurate alignment measurements on the go. The OT-4040 Alignment Laser System enables instant measurement of X-Y deviation, in real-time, at any point on a visible laser reference line – a line extending up to 300 feet long. Dynamically monitor your project as it unfolds. Simply drop a “transparent” measurement target into any standard NAS tooling sphere along the reference line, and take your reading with the attached central processing unit. The OT-4040 Alignment Laser System is extensively proven by aircraft manufacturers, shipbuilders, and the automotive industry. It has significantly streamlined efficiency and reduced man hours in a varied range of challenging alignment applications.



Optimize precision and gain a greater measure of confidence. The OT-4040 provides conservatively specified 0.001-inch resolution at distances up to 300 feet. A third generation fiber-coupled laser diode delivery system ensures exceptional beam coherence over long distances – even in demanding outdoor environments.

Concentrate on your work, not your alignment system. The OT-4040 couldn't be easier to operate. In fact, even first-time operators can be up-and-running in less than five minutes with hardly a glance at the instruction manual. The system is that simple and intuitive.

Extreme industrial environments? No problem. The OT-4040 CPU and OT-4040 Target are built to withstand the rigors of day-to-day, on-the floor use.

Many consider laser trackers “too much solution” for alignment applications alone. Conversely, optical telescopes, with their slow and subjective performance, are often considered “too little solution”. The OT-4040 provides the best of both worlds: it's exceptionally accurate, yet simple-to-operate and cost effective. Moreover, the OT-4040 system is optimized for instant, drop-in replacement of optical telescope systems via NAS standard housings. The overriding advantage is multipoint, dynamic, objective measurement – something neither laser trackers nor optical telescopes individually offer.

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Applications include a broad range of alignment and measurement tasks, such as shaft, accelerator, assembly line, bore, catapult, engine and engine mount, escalator, fixture, machine tool, propeller, rail, roller, spindle, surface, and turbine alignment. The system also supports precision straightness, flatness, and

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