

TLAserX22™ Family Of Laser Micrometers Delivers Total Measurement Control



The TLAserX22™ family of micrometers, connected to your PC via the TLAser400™ micrometer interface card, is ready to provide precise, reliable measurements with unparalleled processing power and flexibility at a low cost.

LaserLinc's TLAserX22™ family of micrometers—compact 22 millimeter (.85 inch) units—includes three models: TLAser122™, TLAser122s™, and TLAser222™. They all feature advanced prism-based scanning technology that assures exceptional accuracy and repeatability. This smaller, simpler design has a shorter optical path and fewer components, which reduces the chance of errors entering the system. The prism's more efficient optical path minimizes positional and linearity errors and is unaffected by motor wobble.

The TLAserX22 family of micrometers provides accurate, non-contact measurement for a wide range of applications, such as wire, cable, automotive hose, plastic and steel pipe, medical tubing, and ribbon fiber. They also measure transparent products with the same precision as it does opaque materials.

Each model, combined with LaserLinc's TLAser400™ micrometer interface card and Total Vu™ software, provide powerful data processing, including process control,

to increase productivity and improve quality, as well as document your results—all on a standard Windows PC. This PC-based system achieves unparalleled processing power, data storage, and networking flexibility at low cost. You can process data at the full measurement rate of all the micrometers in the system—up to 16 micrometers per PC.

You can rely on LaserLinc micrometers to deliver the best gauging and processing tools for continuous, real-time measurement, control, and documentation of your product quality. Our success is the result of your success—we back our products with the applications engineering and staff support necessary to keep your lines running full-time.

All LaserLinc micrometers have a **four-year warranty**, parts and labor. In virtually all cases, a temporary replacement will be shipped to you overnight if your micrometer needs warranty repair.



Compare the features and benefits of these models on the following pages—then choose the one that works best for your operation.

TLAser122™ Micrometer— The Right Choice For Many Measurement Applications



Versatility is an extremely important feature of the single-axis TLAser122™ micrometer. It is designed to be extremely repeatable, accurate, compact, and affordable.

In addition to typical applications requiring a single diameter measurement, the TLAser122 micrometer is a great choice for multi-strand measurement of products such as enameled wire and fiber ribbon. Total Vu™ software's multi-strand option offers one hundred percent inspection of an unlimited number of strands using one or more micrometers. Our multi-strand option can also detect broken or missing strands.

The TLAser122 micrometer is also a component in the BenchLinc™, our self-contained bench-top inspection system featuring an auto rotating zero chuck—see www.laserline.com for more information about the BenchLinc system.



With LaserLinc's TLAser400 card and the micrometers of your choice, you can measure multiple strands simultaneously (as many as you want), to assure precise and complete inspection of optical ribbon fiber, magnet wire, or monofilament.

SPECIFICATIONS

	TLAser122	TLAser122s	TLAser222
Measurement Range	.003" – .85" (.075mm – 22mm)	.003" – .85" (.075mm – 22mm)	.003" – .85" (.075mm – 22mm)
Measurements per second	400	400	800 (400 per axis)
Resolution	.000001" (.025µm)	.000001" (.025µm)	.000001" (.025µm)
Repeatability (Single Scan)	±.0001" (±2.5µm)	±.0001" (±2.5µm)	±.0001" (±2.5µm)
Repeatability (Two Second)	±.000005" (±.125µm)	±.000005" (±.125µm)	±.000005" (±.125µm)
Accuracy	.00002" ±.01% of max. measurement size	.00002" ±.01% of max. measurement size	.00002" ±.01% of max. measurement size
Dimensions (H x W x D)	4" x 10" x 1.25" (102 x 254 x 32mm)	Transmitter: 4.2" x 5.3" x 1.25" (107 x 135 x 32 mm) Receiver: 4" x 3" x 1.25" (102 x 77 x 32mm)	4.5" x 8.5" x 1.25" (115 x 216 x 32mm)

TLAser122s™ Micrometer Design—For Multi-Strand And Larger Products

Except for its two-part housing, the single-axis TLAser122s™ micrometer is nearly identical to the TLAser122. Separating the transmitter and receiver in their own respective units enables them to be mounted with a greater distance between them to make room for larger products and multiple assemblies.

One of the leading applications for the TLAser122s micrometer is multi-strand measurement. A large array of strands would be obstructed by the connecting base of the standard TLAser122 micrometer, but mounting the transmitter on separate stands allows freedom of movement for all strands.

Dual-Axis TLAser222™ Micrometer Measures Ovality And Diameter In Two Planes

The TLAser222™ micrometer measures product diameter and position in two planes at right angles to each other—making it possible to check ovality and detect flaws continually, using only one compact micrometer. LaserLinc's system design also offers the unique capability to measure multiple strands simultaneously with just one TLAser222.

The compact size of the TLAserX22 micrometers—only 1.25 inches thick—allows them to work in very tight spaces, and their rugged construction stands up to harsh conditions.



Measuring large products is another frequent application for the two-piece design, because the transmitter and receiver cases can be spaced to accommodate bulky products. Also, moving the two sections away from extremely hot products allows those products to be measured safely.

Another common application for the TLAser122s is measuring film or sheet thickness. The transmitter and receiver can be separated by two feet or more to accommodate the path of a sheet of material passing over a roller.



The standard LaserLinc system includes the appropriate X22 micrometer, a TLAser400™ interface card for your PC, a 25 foot cable to connect the micrometer to the card, and LaserLinc's Total Vu™ software with a comprehensive set of standard features to maximize the return on your gauging investment.

For dimension drawings and other information on these and other LaserLinc products, please visit us online at www.laserlinc.com or phone 888-707-4852.



The LaserLinc Combination: The Precision Of TLAser Micrometers And The Power And Flexibility Of Total Vu™ Software

LaserLinc's Total Vu™ software and TLAser400™ micrometer interface card is all you need to leverage the versatile processing power of a standard PC and:

- Reduce scrap and save material;
- Boost production speed;
- Improve product quality;
- Provide process performance data and reporting to management;
- Analyze and improve your process with trending, SPC charting, and Process Tracker™;
- Integration with your plant's information base.
- Enhance operator productivity with complete process information and easy-to-use interface.

Each plug-and-play TLAser400 card can connect your standard PC with up to four laser micrometers, and up to four interface cards can be installed in one PC—to

handle as many as 16 micrometers per PC. Add new LaserLinc micrometers or those from other manufacturers with ease by snapping the appropriate compatibility module onto the TLAser400 card. LaserLinc can provide modules to work with any major brand of micrometers.

Using a 500 MHz sampling frequency (2-nanosecond resolution) to process the signals from the 16 micrometers, the TLAser400 card handles data as fast as it can be produced. With this high rate of processing, each scan can be used to evaluate production in real time.

Your other critical process variables can also be monitored, including length, temperature, pressure, load, and RPM, through digital, analog, or other interfaces.

Collected data can be displayed in a full array of SPC and trend charts and reports for networking to process engineers and management for analysis.

Please contact us to see how LaserLinc can address your measurement and quality needs. For more details about LaserLinc's full offering of products, please see our website at www.laserlinc.com.



All LaserLinc products are made in the U.S.A.

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