| Wavelength range | 400-700 nm |
|-------------------------------------|--|
| Optical resolution | 1.0 nm (FWHM) |
| SNR | 8000:1* |
| Cycle time | 40 ms (minimum) to 3-5 seconds |
| Communication protocol/interface | TCP/IP over Ethernet • RS-232 RS-485 • ModBUS RTU to PLC |
| Dimensions (sensor) | 180 mm x 160 mm x 100 mm |
| Dimensions (with integrated pump) | 980 mm x 410 mm x 460 mm |
| Weight (sensor) | 4 kg |
| Weight (with integrated pump) | 33 kg |
| Sample interface | Contact Ocean Insight for options |
| Output | Light source-compensated transmission/absorption |



We've helped some of the biggest names in the business. We'd love to work with yours.



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THE OCEAN LTMS.

(Compact Size

(Real-Time, In-Line Monitoring in the Dye Tank

The LTMS can be implemented directly into your manufacturing workflow, making your products more consistent than ever. And your life a lot easier.

What does it take to ensure the precise color-consistency consumers demand?

Lab-Grade Precision

Easy to Switch **Between Models**



Batch-to-Batch Consistency at a Level of Precision You've Never Seen.

THAT'S THE TRUE COLOR OF SUCCESS.

LTMS is a spectroscopy-based system for real-time, in-line color and concentration monitoring of liquids including anodization dyes and plating baths used for ensuring precise batch-to-batch color consistency of anodized parts. The system comprises a rugged transmission/absorption platform with a compact, benchtop configuration making it a ruggedized solution for real-time, in-line monitoring. LTMS automatically handles all liquid collection and system cleaning in real-time which means easy integration, minimal maintenance and no additional hardware design by your engineers. Plus, the LTMS mitigates the need for QC lab inspection which means no need for expensive lab equipment or scientists to run them.

MONITORING COLOR CONSISTENCY, CONCENTRATIONS AND MORE.

You know the LTMS is a powerful tool for managing batch-to-batch color consistency in anodization dye tanks for metal parts and dye baths for textiles. But it's also used successfully for monitoring liquid-concentration levels for chemical coatings and additives in the food and beverage industries.

As an in-line system, the LTMS eliminates the need for transporting samples from the production line to quality control labs — removing a process-bottleneck and making it possible to address quality issues before they become bigger issues.



The LTMS removes the need for the operator to perform their own analysis. Plus, it pulls the sample, performs the analysis, and delivers the data.

Most lab-test equipment requires a trained scientist or technician. The LTMS does not.

> What's more, the LTMS is designed with simple operation and flexibility in mind. Minimal technician training is required to run the LTMS, and the system can be moved easily from tank-to-tank to measure organic dyes or other concentrations in just minutes. All data can be transferred to your systems for additional analysis and storage.