

# LTL-XL Retroreflectometer

DELTA



For more than two decades, DELTA has focused on pavement marking visibility and the development of retrometers. Most national and international standards for road reflection properties and measurement instrumentation incorporate a significant part of DELTA research.

Download technical and product information from [www.roadsensors.com](http://www.roadsensors.com)

For more information, please visit [www.roadsensors.com](http://www.roadsensors.com)

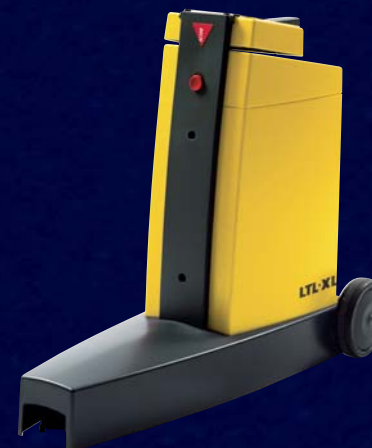
DELTA

DELTA  
Danish Electronics, Light and Acoustics  
Venlighedsvej 4  
2970 Hørsholm  
Denmark  
Tlf. +45 72 19 40 00  
Fax +45 72 19 40 01  
[www.delta.dk](http://www.delta.dk)  
[www.roadsensors.com](http://www.roadsensors.com)

**NEURTEK**  
i n s t r u m e n t s

Poligono Industrial Azitain, Parcela 3A  
20600 EIBAR (Spain)  
Tlfn. +34 943 82 00 82 / Fax. +34 943 82 01 57  
[info@neurtek.es](mailto:info@neurtek.es) / [www.neurtek.com](http://www.neurtek.com)

We help ideas meet the real world





# The reliable choice for professionals

## Why use LTL-XL to measure road marking visibility?

It has long been recognised that visibility of road markings is essential for efficient traffic flow and road safety. Therefore, the retroreflectivity of road markings must be tested regularly. For the sake of safety, performance, and economy, maintenance decisions should be based on measurements.

In all these situations, it is vital that the measurements are reliable.

The LTL-XL retroreflectometer is the preferred choice of professionals. Designed for professionals, the LTL-XL, with its advanced technology, can measure night and daytime visibility of all types of road markings at a simulated distance of 30 m. with the highest level of accuracy.

## Features

- Night and daytime visibility measurement
- Ergonomic and easy-to-use lightweight design that reduces operator fatigue and discomfort by allowing single-handed operation and single touch controls
- Intuitive and easy to use
- Newest technology with smart and upgradable features
- Safeguarded for the future with seamless connection to any system running a Web browser, such as PCs and PDAs
- Long lifetime due to solid state technology

- Night and daytime visibility measurement
- Short measurement time
- Large memory with a capacity for more than 200,000 measurements
- Multiple language display
- Humidity and temperature measurements show the external weather conditions
- Wet timer to facilitate measuring wet road markings
- Rapid geotagging using the built-in precision 50 channel GPS receiver
- Built-in printer



Night and daytime visibility



GPS mapping



Easy connection to any PC equipment, PDAs, or Smartphones

## Night and daytime visibility

The LTL-XL measures nighttime visibility  $R_L$  and daytime visibility  $Q_d$  traceable to PTB- Germany and NIST- USA. Furthermore the LTL-XL measures the ambient temperature and relative humidity.

## Reporting and data communication

Using the road sensor control software, the data from LTL-XL can be printed from the built-in printer or downloaded for report generation. Geotagging using GPS mapping software allows you to link your data to geographical maps and GIS systems. The USB, Bluetooth, and Ethernet connectivity allow easy connection to any PC equipment, PDAs, or Smartphones, and the built-in Web server enables the connection to any system running a Web browser. So, whatever your preference, it is easy to convert LTL-XL data into comprehensive reports.



## Measures all types and colours

Due to DELTA's gradient index technology and patented optical system, the LTL-XL can measure all types of flat and profiled markings. The sensor response, combining the CIE eye response and CIE illuminant A, meets both CEN and ASTM requirements for profile capacity and colour. And the LTL-XL can even measure wet nighttime markings.

## Easy and safe

The advanced ergonomic design allows single-handed operation and

this makes the LTL-XL easy and safe to use in traffic. The measurements and settings are done with single-touch. The colour display is easy to read. For improved user handling, the LTL-XL can be fitted with wheels and adjustable handles.

## Advanced technology

The highest accuracy and many features of the LTL-XL not only put it ahead of all other retroreflectometers on the market, but extend its use into the future.

