

# 932 Handheld Sign Retroreflectometer



  
**ROADVISTA**

a  GAMMA SCIENTIFIC company

## 932 Handheld Sign Retroreflectometer



### *Retroreflectometers*

With over three decades of highway safety leadership and innovation, RoadVista has set the standard in retroreflectometer accuracy, reliability and usability.

RoadVista, a Gamma Scientific company, is committed to making roads visibly safer with a complete selection of instruments and laboratory testing services for retroreflection.

### *Applications*

- Traffic Signs
- Pavement Markings
- Sign Sheeting
- Safety Clothing
- Light Testing Services and Calibration

### *Additional Instruments*

To view the complete line of retroreflectometers from RoadVista, visit [www.RoadVista.com](http://www.RoadVista.com)

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The **RoadVista Model 932** is a handheld retroreflectometer designed for use in the field, laboratory or QA/QC environment. It is designed to fully characterize the retroreflection (RA) and retroreflected night-time (CIE1931xy) color of road signs, high visibility safety clothing and other materials.

This patented (US Patent # 7,961,328) design allows you to know, with the press of a button, exactly how bright your retroreflector will appear to drivers, and determine if the color falls within the defined color box.

The adjustable entrance angle and observation allows for complete characterization of most retroreflectors, including full high-visibility clothing retroreflective testing to EN471 and ANSI107.

The Model 932 comes standard with a Bluetooth wireless interface and USB computer interface both allowing for remote operation of the instrument and data logging. The internal memory has the capacity to store more than 32,000 measurements.

The sensitive light sensor meets ASTM E1709 and ASTM E2540 requirements with the CIE standard human eye response. Our world-class photometric filter fit is unmatched by the competition and allows extremely accurate measurements of other colors using the single white reference standard with no correction factors.



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### Features

- Measures all types of retroreflective materials with a single measurement
- Meets ASTM, CIE, ANSI, BS, EN & DIN specifications
- US Patent # 7,961,328
- Observation angle adjustment from 0.2° to 2.0°
- Entrance angle adjustment from -45° to +45°
- World-class photopic-corrected detector and source "A"
- Requires only one reference standard without any correction factors
- Self-contained commercially available battery or mains power
- Graphical TFT-color touch-screen display
- Built-in Bluetooth Wireless Capability
- USB Computer Interface
- Built-in averaging
- Internal storage for more than 32,000 measurements
- Foam-lined carrying case
- Data Management Software (DMS) allows the user to quickly transfer data from the instrument to a computer via the USB connection for data management and report generating



## 932 Retroreflectometer Specifications

Geometry	
Entrance Angle	Continuously available from -45° to 45° with electronic feedback
Observation Angle	Stepper controlled, continuously adjustable from 0.2° to 2.0°
Light Source Angular Aperture	0.1°
Receive Angular Aperture (Point)	0.1°
Field of Measurement	1 inch (25mm) diameter spot
Specifications (All Models)	
Standards	Meets all requirements of ASTM E1709, ASTM E2540, EN 12899-Testing in compliance with: ASTM D4956, EN471, ANSI 107
Detector Responsivity	Photopic response in accordance with ASTM E1709 paragraph 6.4.2 and ASTM E2540 paragraph 6.4.2
Range (cd/lx/m <sup>2</sup> )	0-10,000
Data Memory	> 32,000 measurements
Color Measurement	Determines CIE 1931 xy retroreflected night-time color coordinates
Computer Interface	USB and Bluetooth
Power Supply	Removable 12 VDC, 2.4 Ah battery (DeWalt P/N DC9071)
Charger	110 VAC, 60 Hz (add -1 after model #); 12 VDC cigarette lighter (add -2 after model #); 220 VAC, 50 Hz (add -3 after model #)
Operating Temperature	0°C to 50°C (32°F to 122°F)
Operating Humidity	0 to 95% non-condensing
Length	Approximately 15 inches (380mm)
Width	Approximately 4.5 inches (115mm)
Height	Approximately 12.75 inches (325mm) with battery
Weight	Approximately 6.4 lbs (2.9kg) with battery
Standard Accessories	
Foam-lined carrying case	
Measurement Area Reducers	
Battery Charger	
Two Batteries	
Calibration Standard	
Calibration Certificate	
Windows Software with Mapping	
Optional Accessories	
Annual Calibration Service	