

LIDAR RR

Precise Laser Speed & Distance Measurement Designed Especially for Railroad Use



- **In Classification Yards**
- **Monitoring Line Speed**
- **Speed Restriction Enforcement**
- **Railroad Police Duty**

Laser speed measurement with a range of over 1200 meters and 0.2 KPH sensitivity make the Viatronics LIDAR RR the best choice for railroad applications.

When a major European railroad asked our Engineers for help with rail car speed issues, it was apparent that modification of our existing LIDAR's controlling firmware was needed. "Speed" in the railroad sense is different from the automobile enforcement sense. What resulted is a speed measurement tool that is accurate to a 0.2 KPH - law enforcement only requires 2.0 KPH accuracy.

Moreover, the LIDAR RR can discriminate between closely spaced individual cars among groups of cars in settings that would be impossible for radar. It's the ideal tool for loss prevention through speed control in the classification yard.

EU Model Available

The original LIDAR is law enforcement's top choice for precision speed measurement of closely spaced vehicles, which makes it ideal for rail yard settings.

The LIDAR RR allows pinpoint speed measurement and target discrimination accuracy in settings that would be impossible for other types of speed measurement.

Forward-Swept Li-ion Handle

Li-ion forward-swept handle facilitates a more natural grip with less tension on the wrist and better posture for the operator.

- **Monitor retarder exit and coupling speeds**
- **Measures distances to within 1/2 foot (0.15 meter)**
- **0.2 KPH speed sensitivity**
- **Self Contained - Rechargeable battery operated**



Speed and Range in Heads-Up Display



High Powered Optics: The Heart of the LIDAR RR

VIATRONICS

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LIDAR RR



Specifications

Dimensions:	9.4" Height, 6.8" Length, 4.2" Width (23.9 cm Height, 17.3 cm Length, 10.7 cm Width)
Weight:	Including Battery Handle - 3.9 lbs (1.77 kg)
Housing:	Metal case with rubber end caps
Environmental:	-30° to +60° C, operating -40° to +85° C, non-operating
Humidity Protection:	+37° C, 90% Relative Humidity
Battery Life:	Typically 300 - 330 charge cycles
Battery Charge:	Li-ion battery: Approx. 2 - 3 shifts (6) AA Alkaline batteries: Approx. 2 shifts (6) AA Rechargeable batteries: Approx. 2 shifts
Type:	Handheld LIDAR offering Tracking mode, Single-Shot mode, and Time/Distance mode.
Acquisition Time:	Less than .4 second
Nominal Range :	Maximum <5 feet (1.5 m) Normal = 2500 feet (762 m) approaching targets Maximum > 4,000 feet (1200 m)
Range Accuracy:	± .5 feet (.15 meter)
Speed Measure:	0.2 mph to 299 mph (0.3 km/h to 481 km/h, 0.17 knots to 344 knots)
Speed Accuracy:	±1 mph (±2 km/h, ±1 knots)
Time/Dist. trigger mode:	Separate trigger depressions when target enters and exits speed zone.
Remote Trigger:	Remote trigger signal available through I/O Port.
Target Speed Tone:	Variable audio tone corresponding to target speed.
Target Return Tone:	No tone when beam is off target; tone repetition increases as beam moves into target and return signal quality increases.
Switching Output:	I/O Port signal for operation of external devices (e.g. a camera). Toggles when speed exceeds speed signal setting. (special order only)
Operating Wavelength:	905 ± 10 nm Peak @ 25° C
Eye Safety:	FDA/CDRH CLASS 1 Laser Device (Eyesafe)
Power Output:	50 uW maximum average power. (385 nJ maximum pulse energy) (meets FDA/CDRH regulations)
Pulse Width:	< 30 nsec.
Beam Divergence:	< 3 mrad FWHM. 3 feet x 3 feet @1000 feet (.9 meters x .9 meters @ 304.8 meters)

Spanish LCD Available

LIDAR LR-EU  Approved

Single-Shot and Continuous Tracking Modes

The LIDAR RR can be set in Single-Shot mode where the trigger is pressed and the unit locks on a single speed reading. Or, the unit can be operated in tracking mode where the trigger is pressed and the unit takes continuous, real-time speed readings.

Doppler-Type Audio Tracking

In some instances, laser operators also operate radar, the LIDAR RR generates a continuous Doppler-type audio tone which correlates to the target speed. Just like the audio on a police radar, this audio is a substantial aid to understanding and building a target tracking history.

Features include

- High powered optics
- Ergonomic, rechargeable battery handle provides better balance, which means less physical stress
- Integrated battery charger
- Time Distance Converter (TDC) for improved time/distance measurements
- Doppler Audio Tracking

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