


RIEGL LD90-3VHS-FLP First & Last Pulse distance meter

Laser Distance Meter for use with or without reflectors which, because of its long-range and its "First & Last Pulse"¹⁾ facility, is especially well suited for scanner applications.

LD90-3100VHS-FLP Very High-Speed , highly accurate distance meter for scanner applications.	Measuring range depending on the reflection coefficient ρ of the target	
	good, diffusely reflecting targets, $\rho \geq 80\%$	2m up to 200 m ²⁾
	bad, diffusely reflecting targets, $\rho \geq 10\%$	5 m up to 60 m ²⁾
	Reflecting foil ³⁾ or plastic	10 m up to 350 m @ 25mm resolution
	cat's-eye reflectors	10 m up to 700 m @ 50mm resolution
	Minimum distance between two targets, typically	5 m
	Measurement accuracy ⁴⁾	typically ± 25 mm
	Measurement resolution (selectable)	25 mm or 50 mm
	Measurement rate	2000 Hz
	Laser wavelength	typ. 0.9 μm (near infrared)
	Beam divergence ⁵⁾	3 mrad x 0.5 mrad
	Laser product classification according to IEC60825-1:2007	
	The following clause applies for instruments delivered into the United States: Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.	
	Interface	RS422 serial interface, 115.2 kBd, asynchronous

- 1) First, Last, or First&Last target alternatively selectable
- 2) typical values for average conditions. In bright sunlight, the operational range is considerably shorter than under an overcast sky.
- 3) reflecting foil 3M DG4090 or equivalent, minimum dimensions 0.45 x 0.45 m²
- 4) standard deviation, plus distance depending error ≤ 20 ppm
- 5) 1 mrad corresponds to 10 cm beamwidth per 100 m of distance

General technical data and dimensions as given in our general data sheet LD90-3 series.

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Laser Distance Meter for use with or without reflectors which, because of its long-range and its "First & Last Pulse"¹⁾ facility, is especially well suited for scanner applications.

LD90-3300VHS-FLP <i>Very High-Speed</i> rangefinder module for long range scanner applications.	Measuring range depending on the reflection coefficient ρ of the target	
	good, diffusely reflecting targets, $\rho \geq 80\%$	3 m up to 400 m @ 50mm resolution ²⁾ 3 m up to 350 m @ 25mm resolution ²⁾
	bad, diffusely reflecting targets, $\rho \geq 10\%$	5 m up to 120 m ²⁾
	Reflecting foil ³⁾ or plastic cat's-eye reflectors	10 m up to 700 m @ 50mm resolution 10 m up to 350 m @ 25mm resolution
	Minimum distance between two targets, typically	5 m
	Measurement accuracy ⁴⁾	typically ± 50 mm
	Measurement resolution (selectable)	25 mm or 50 mm
	Measurement rate	2000 Hz
	Laser wavelength	typ. 0.9 μm (near infrared)
	Beam divergence ⁵⁾	approx. 3 mrad
Laser product classification according to IEC60825-1:2007 ⁶⁾		
The following clause applies for instruments delivered into the United States: Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.		
Interface	RS422 serial interface, 115.2 kBd, asynchronous	



Viewing the laser output with certain optical instruments designed for use at a distance (for example, telescopes and binoculars) may pose an eye hazard.

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- 2) typical values for average conditions. In bright sunlight, the operational range is considerably shorter than under an overcast sky.
- 3) reflecting foil 3M DG4090 or equivalent, minimum dimensions 0.45 x 0.45 m²
- 4) standard deviation, plus distance depending error ≤ 20 ppm
- 5) 1 mrad corresponds to 10 cm beamwidth per 100 m of distance
- 6) For the unscanned laser beam only. For a scanned beam, laser class 1 (eyesafe) is in most cases achievable.

General technical data and dimensions as given in our general data sheet LD90-3 series.

Information contained herein is believed to be accurate and reliable. However, no responsibility is assumed by RIEGL for its use. Technical data are subject to change without notice. Data sheet RIEGL LD90-3VHS-FLP, 25/03/2010



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