

» VRS

Variable Range Simulator



The Variable Range Simulator (VRS) is a system used for range simulation and testing Laser Designators and Laser Range Finders (LRF) for accuracy and functionality. The VRS can test LRFs operating in a broad range of wavelengths (850 nm to 1570 nm), with the option of selecting up to three discrete wavelengths to be incorporated into the VRS. The VRS can be activated by either a laser pulse or an external electronic trigger and simulate range, laser pulse width and energy per pulse. Additionally, the operator has the ability to regulate the VRS test parameters to evaluate the performance characteristics of each LRF system, based on the return signal from the LRF

» FEATURES

- ▶ Simulate ranges, laser pulse width and energy per pulse
- ▶ Operate in either a static or dynamic target simulation mode
- ▶ Superior ranging accuracy
- ▶ Adjustable LRF beam location
- ▶ PC controlled
- ▶ Laser for alignment via a visible channel

» OPTIONAL FEATURES

- ▶ Dynamic targets can be simulated with up to 15,000 lines stored in one CSV file
- ▶ Select up to three independent laser sources/wavelengths
- ▶ Multiple target simulation

Distribution in the UK & Ireland



Lambda

www.lambdaphoto.co.uk

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» SPECIFICATIONS

	VRS	VRS-EX
Wavelengths	850 nm to 1570 nm (up to 3 wavelengths per VRS unit)	
Input Trigger Types		
Optical	Single laser pulse available at any wavelengths between 850 nm to 1570 nm	
Electronic	TTL	
Range Simulation*	120 m - 30 km	80 m - 60 km
Range Resolution	1 m	0.5 m
Range Accuracy	±1 m	±0.5 m
Pulse Width	12 - 80 nsec	6 - 160 nsec
Pulse Width Accuracy	±1 nsec	
Laser Power Output	20 mW @ fiber end (other optional)	
Dynamic Output Power Range	20 dB (non-linear) electronic control (optical filters can be added by the user)	
Laser Power Output Resolution	0.1 dB	
Communication Type	RS-232, USB communication by serial adaptor	
Operation Modes		
Static object simulation	Up to two targets	Up to three targets
Options		
Dynamic Target Simulation	Up to two targets	
Pulse Rate	4.8 kHz (max)	
Memory	Up to 15,000 lines stored in one file	
Profile Format	CSV profile upload	
Configurations		
	19” Rack mountable - 3U	
	19” Stand alone - 3U	
Interlock Control Feature	“Dry contact” circuitry	
Visible Alignment Laser	630 nm	
Optic Fiber Holders Mechanical Jig		
Input Power	110/220 VAC - 1.25 A	
Operating temperature	0 °C to 40 °C	

*The range simulation is calibrated with the provided fiber optic bundle.

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