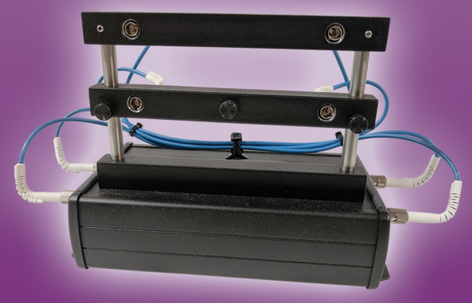
VOCAR LT II Police Laser Certification System

VOCAR LT II Hardware



Technical Specifications

Test	Range	Accuracy
Pulse Width	1.25ns - 320nS	.1nS
Pulse Rep Rate	1Hz - 1,000Hz	.25Hz
Power	10uW - 300mW	5%
Wavelength	884nM - 924nM	.1nM
Short Distance	> 100 FT	± 1 FT
Long Distance	> 200 FT	± 1 FT
Speed Simulator	Calculated from Pulse Repetition Rate	± 1 MPH
Frequency Counter	1Hz - 50 MHz	± 2 Hz
Unit Under Test Voltage	7 Volts - 16 Volts	.25 Volts

Minimum Personal Computer Software Requirements:

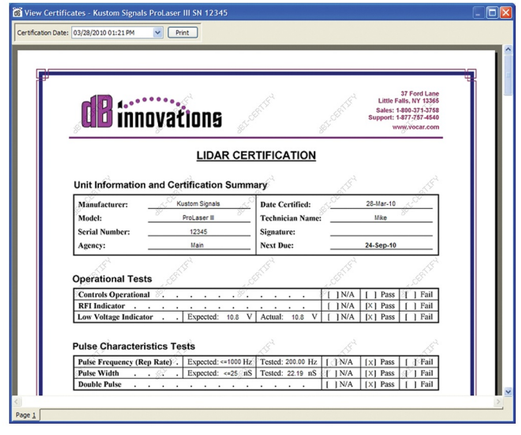
- Processor Speed: 1.5 GHz
- RAM: 1 GB
- Hard Drive Space: 1 GB
- (1) CD-ROM Drive
- (1) USB Port
- Video Display: 1024 x 768 pixels
- Operating System: Windows XP, Windows 7 or Windows 10.

VOCAR LT II Laser System

VOCAR LT II SYSTEM BENEFITS

With the majority of police laser (LIDAR) traffic units in need of periodic accuracy certification to be court accepted, dB Innovations offers our easy to use patent pending VOCAR LT II Laser Certification System suitable for both laser service providers and do-it yourself police departments.

- ☑ **Fast** – Certify a police laser unit in 10 minutes or less.
- ☑ **Versatile** – Certify laser units from all major manufacturers.
- ☑ **Portable** – Easily use in the field or on a work bench.
- ☑ **Expandable** – Purchase optional test probe accessories to meet your local requirements.
- ☑ **Flexible** – Use as stand alone equipment or for computerized tamper-proof certifications with our included dbiCertify software when connected to your PC.
- ☑ **Documentation** – Add testing integrity when using tamper-proof dbiCertify software to store certification results, seamlessly complete and print customized certification forms with your supplied PC and printer.



dbiCertify software records all test data and generates a customized certification form.

22 Washington Avenue, Endicott, NY 13760
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dB innovations

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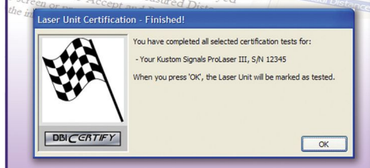
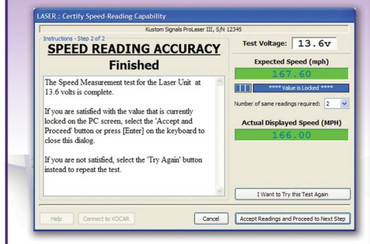
VOCAR LT II "STANDARD" SYSTEM

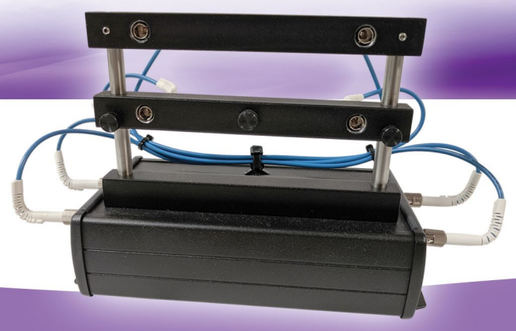
Equipment

VOCAR LT II "Standard" System Components:	Component Description
Windows-based dbiCertify software	For tamper-proof testing, automatically store data results and print customized certification forms with your PC and printer.
Low Voltage/Power Supply Current * Software only	Pass/fail verification test based on laser unit's display indicator light to ensure correct power is available for the laser unit to operate.
Radio Frequency Interference (RFI) * Software only	Pass/fail verification test used with a 4-watt radio device (not included) to ensure laser circuitry and accuracy is not effected by excessive radio frequency interference.
Test # 1 – Power Output	Aids in eye safety by determining intensity of optical power (brightness of laser) generated in microwatts and that output does not exceed a prescribed maximum level.
Test # 2 – Pulse Characteristics	**Measures Three Areas:** 1. Pulse Width: Measures the "on" time of each pulse being emitted by the Lidar unit. 2. Pulse Repetition Rate: Number of pulses per second emitted by the Lidar unit. 3. Double Pulse: A pass/fail test to ensure the pulse train emitted by a laser unit does not contain any extraneous pulses.



dbiCertify software guides you through the testing process, automatically stores results and provides reminders for next certification due dates.





VOCAR LT II Standard System includes dbiCertify software and test probe accessories for pulse width, pulse repetition rate, double pulse and power output (laser output.)

VOCAR LT II ADDITIONAL TESTS

VOCAR LT II Additional Tests & Accessories	Component Description
Test # 3 – Short Range Distance	Verifies laser unit can accurately measure a distance of approximately 100 feet. (See notes below.)
Test # 4 – Long Range Distance	Verifies laser unit can accurately measure a distance of approximately 200 feet. (See notes below)
Test # 5 – Internal Clock Frequency	Measures time base of a laser unit. This is a crucial test as all laser unit measurements are based on this clock. Requires test cable (not included). Contact Lidar manufacturer for cable specifications.
Test # 6 – Speed Simulation	Produces signals that simulate a moving vehicle. Eliminates the need for an actual moving vehicle and a certified RADAR unit to conduct this test.
Test # 7 – Wavelength (additional cost)	A test to measure the infrared light color of the laser (the wavelength) in nanometers when used in conjunction with the supplied Ocean Optics spectrometer module.
Beam Alignment Stand	Three tests bundled together in a pre-measured collapsible stand. (See notes below)

➤ **Distance Tests:** dB Innovations' unique probes conduct short and long range distance tests to ensure the laser unit is measuring a distance accurately, without requiring any manual distance measurements or a dedicated testing area. Simply point the laser unit at the test optics and a distance measurement is taken.

➤ **Beam & Alignment Stand:** Three tests bundled together in a pre-measured stand.

- Sight Alignment: Pass/fail test to ensure target indicator on a laser unit is lined up with the laser beam by verifying a target on a stand 200 feet away.
- Horizontal Beam Width: Pass/fail test to verify the horizontal beam width is not greater than the maximum allowed. Helps to ensure the correct target of a laser unit is being measured.
- Vertical Beam Width: Pass/fail test to verify the vertical beam width is not greater than the maximum allowed. Helps to ensure the correct target of a laser unit is being measured.

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