



Cercis



Beacon

Putting Light to the Test

▶ Volume 6, Issue 2

Cercis MILES (Multiple Integrated Laser Engagement Systems) Reference Source + Collimator

November 3, 2006

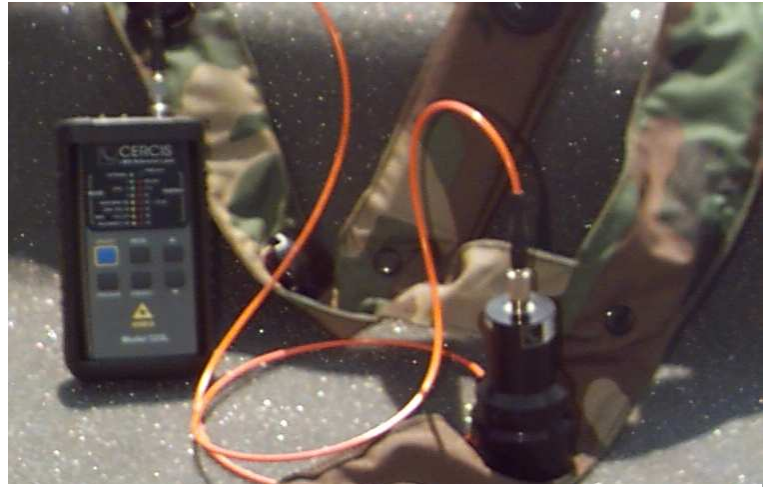
Cercis 520L MILES Reference Laser with Collimator

Cercis Model 520L is a handheld 904 nm laser source used to simulate a pulsed laser for testing of target acquisition devices. It includes eight user-selectable modes—1, 2, 3 kHz and External up to 10 kHz, plus MILES (Multiple Integrated Laser Engagement Systems) Codes 0, 27, 29 & 30. Six energy levels are selectable—17.5, 22, 28, 34, 38 & 43 μ Ergs, and the user may adjust energy output from 1 μ Erg to 100 μ Ergs (~0.1 nW to 10 nW). Selectable word sequences (1, 2, 4, 8 or 16 words), or auto trigger (to send MILES codes in ~1 second intervals) are user-options.

A collimator, designed to fit over a domed detector, includes lenses which diffuse the modal scattering of laser output and focus the beam onto the device under test. A detachable FC:FC multimode fiber jumper is included.

Features

- ◆ FC/PC compatible optical port
- ◆ 904 nm laser diode source, fiber coupled
- ◆ LEDs illuminate at active mode and energy
- ◆ Compact, 3X5X1" plastic, handheld enclosure
- ◆ Internal 9V battery + AC port, 1.3mm center negative
- ◆ Real keys—all features are key-accessible



Cercis Model 520L MILES Universal Reference Laser with Collimator

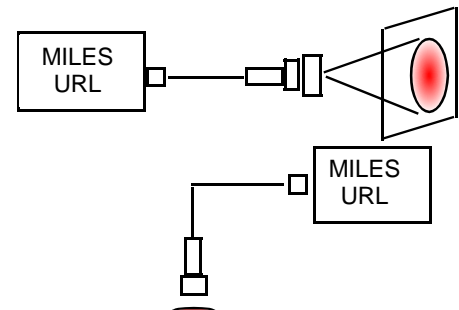
Front Panel—Cercis 520L Reference Laser

	EXTERNAL	● ●	PWR (BAT)	
	1	● ●	ADJUST	
(kHz)	2	● ●	17.5	
MODE	3	● ●	22	ENERGY
NEAR MISS	(20)	● ●	28 (μ Ergs)	
UNIV KILL	(0)	● ●	34	
MAN KILL	(27)	● ●	38	
RESURRECT	(30)	● ●	43	

Model 520L	Units	Typical
Wavelength	nm	904 CW Laser
Wavelength Range	nm	+/-20
Spectral Width (FWHM)	nm	2
Stability 1 hr. max. deviation	dB	<0.1
Source Fiber Pigtail—Core/Cladding	μ m	5/125
Mode Select – Adjustable Range (approximate)	nW μ Ergs	0.1 – 10 1 - 100
Battery Life (approximate) Battery Low	hrs	7–10 PWR LED flashes if battery low
External Input TTL signals 2.4 – 5V or 50 ohm	MHz	0 – 10
Diffusing Adapter		Units / Typical / Description
Optical Spot Size	cm ²	2.3
Description		Over Filtered Photodetector Module 12959442
Input Fiber – Core / Cladding	μ m	62.5 / 125

Identification

POWER	LED on when URL on; blinks if battery low
EXTERNAL	Up to 10 MHz External Input
1, 2, 3 kHz	1, 2 (default), 3 kHz
MILES Words	Ext = 1, 1 = 2, 2 = 4, 3 = 8, All = 16 MILES Words
MILES CODES	Near Miss (29), Univ. Kill (0), Man Kill (27), Resurrect (30)
ENERGY	17.5 μ Ergs (default), 22, 28, 34, 38, 43
ADJUST	Use \blacktriangle \blacktriangledown keys to increase or decrease calibrated power density (~ range 0.1 nW to 20 nW; 1 to 200 μ Ergs)



Custom/OEM Requirements Welcome.

If you have a custom requirement for a fiber optic, medical, sensor, industrial or military application, please contact us.



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to the Test**

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We're on the Web!
www.cercis.com

Add to Mailing List/Corrections (attach business card)

Name: _____
Company: _____
Address: _____

City: _____ State: _____ Zip: _____
Phone: _____ FAX: _____
EMAIL: _____
Primary Function: Engineering _____ Research _____
Technician _____ Scientist _____ Purchasing _____
Sales/Mktg _____ Management _____ Other _____
Do you plan to purchase any of the following during the next 1
mo _____ 3 mos _____ 6 mos _____ 1 yr _____
Light Source _____ OPM _____ VFF _____
 Have a Cercis representative contact me. Add to mail list.

Fiber Optic Range Tester

Cercis provided this Fiber Optic Range Tester (FORT) for testing a target acquisition system. It has four user-selectable lengths—500, 1000, 2000, and 4000 meters, which can simulate ranges up to 1000, 2000, 4000 and 8000 meters, respectively. There is an USB interface for computer or remote control, and a 670 nm red visible laser that can be used for alignment of the collimator to the free-space laser source or for optical component inspection or detection of fiber micro-bends or breakage.

There are two collimators—which can be used interchangeably for laser input or bypass port output—provided with the FORT. These include a helical focuser which can be set for use with various-wavelength lasers. The collimators include a 2" (50 mm) diameter coated lens. An FC optical port provides connection to an FC connector jumper.



The FORT illustrates the capability for Cercis to integrate fiber optic components with embedded systems, to meet the spec requirements of a customer. Please contact us by phone (609-737-5120) or email (info@cercis.com) to discuss your application.



Multi-Laser Light Source for PD Lifetesting



Cercis Multi-Laser Light Source is a custom CW 10-mW 1300 nm 12-laser source used for Automatic Power Control (APC) Testing for InGaAs photodiodes. The unit has an interlock, plus each laser has on/off switch and FC/PC connection. This unit is used for burn-in testing (200C, 24 hrs at 10mW power input) by a leading manufacturer of high speed photodiodes. The 1300 nm lasers are coaxial-pigtailed; all lasers are thermoelectrically cooled. Cercis can customize the unit by changing laser wavelength(s) or optical power output, to suit customer requirements.