



Cercis



Beacon

Putting Light to the Test

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Cercis, Inc.

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Model 6120 Source + Power Meter Débutés at OFC

Cercis Model 6120 combines multiple LASER, VCSEL or LED sources along with a power meter plus a visual fault finder, within a bench-top or 1/4 rack-mount box. It has up to four individually-addressable sources—any wavelength, any fiber, any power—which can be operated simultaneously or individually. The power meter—with autoranging nW, μ W, & mW + dB & dBm with reference store—includes a graphic display and interchangeable adapter port. The visual fault finder uses a universal adapter to quickly check fiber continuity or optical quality. The 6120 combines the flexibility of a modular unit with the easy operation and low cost of a handheld. It is versatile for use in

quality control, manufacturing or engineering environments. Data transfer to printer or PC is possible via an



Model 6120 Multi-Source + Power Meter Fiber Optic Tester

RS232 port. Additionally, the instrument may be controlled via standard PC software—such as LabView[®], Visual C[®] or Visual Basic[®]—to perform repetitive measurements. Customization is available to incorporate additional functions or customer-specific PASS/FAIL criteria.

Sources available include: LASERS, VCSELS, & LEDs in uncooled, coaxial-pigtailed packages. LASER options include: Fabry-Perot 1310, 1550 & 1625 nm; DFB 1310 & 1550 nm; and CWDM (Coarse Wavelength Division Multiplexing) C- and L-Band wavelengths of 1470, 1490, 1510, 1530, 1550, 1570, 1590 and 1610 nm (20 nm intervals). Multimode sources include VCSELS at 850 nm and SLEDs at 850 and 1300 nm. The table above gives minimum and maximum fiber-coupled optical power available from standard stocked uncooled coaxial pigtailed light sources. The power meter detector can be InGaAs (std or hi-power), Si, or Ge.

The optical ports of all light sources and the power meter use Cercis interchangeable FC, ST, or SC (PC or APC) adapters.

Source Type	Wavelength (nm)	Fiber Mode Core Min. (μ m)	Power (dBm)	
			Min.	Max.
VCSEL	850	MM 50	-5	-3
SLED	850	MM 50	-17	-10
SLED	1300	MM 50	-17	-15
SLED	660	MM 1mm	-9	-4
LASER F-P	1310	SM 9	-10	2
LASER F-P	1550	SM 9	-10	2
LASER F-P	1625	SM 9	-10	2
LASER DFB	1310	SM 9	-10	3
LASER DFB	1550	SM 9	-10	3
LASER DFB	1470-1610	SM 9	-10	3
LASER	635	SM 9	0	2

Cercis 2002 Exhibits: OFC & FiberFest New England & MidAtlantic

Cercis will exhibit its optical test instruments at OFC 2002, Booth #3254 at the Anaheim Convention Center, Anaheim, CA, March 19-21. For more information visit www.ofc-online.org.

Cercis also will exhibit at NEFC's FiberFest New England and FiberFest Mid-Atlantic held, respectively, April 29 at Boxborough Holiday Inn, MA and May 1 at South New Jersey Expo Center, Cherry Hill, NJ. Visit www.nefc.com.

Admission to OFC and FiberFest exhibits is free.

Cercis invites you to visit us for a demonstration of the Model 6120 Fiber Optic Tester and Model 610i Data Logging Optical Power Meter. The Model 6120 multiple source + optical power meter is described above; the 610i and 610iH are described on page 2.

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Cercis Introduces Model 610 Data Logging Optical Power Meter

It's Easy. If you can use a cellphone you can operate this power meter

The 610 power meter with data logging uses menus, submenus and lists to label, store and recall measurements as needed.

Store & Recall up to 1000 Records

The 610 can store up to 1000 separate data records—unique user-assigned alpha-numeric label, power reading, reference value, calibration wavelength, operating mode, date and time—in the instruments non-volatile memory. An RS232 port allows stored data to be printed or downloaded to a PC using Cercis TESTworx™ software. All instrument functions can be accessed through remote PC control—automating tedious or complex measurements.

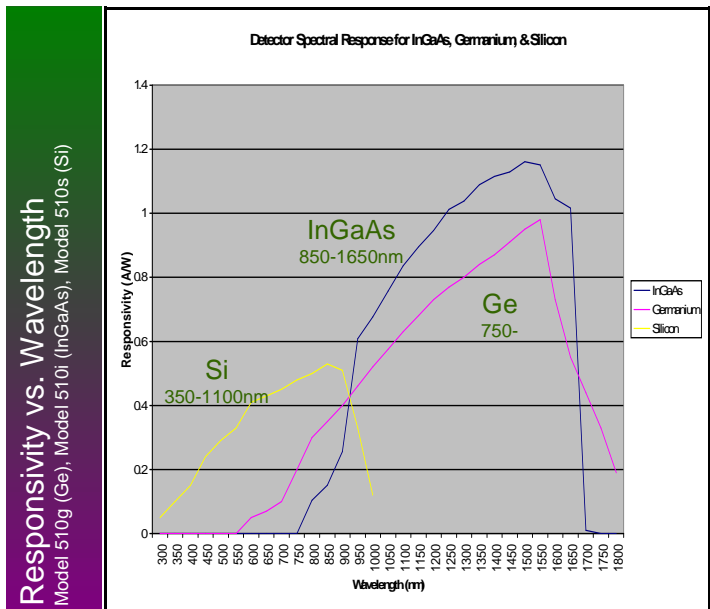


Cercis Model 610 Data Logging Optical Power Meter

All Cercis power meters use proprietary click-on/click-off interchangeable FC, ST, SC, 2.5 mm universal, and **(NEW!)** LC, MU or SMA adaptors. One adapter is provided with each OPM. A comparison of Cercis 610i (InGaAs) power meter versus similar products offered by other manufacturers is included on Page 3. The instruments are housed within a compact, rugged 3X5X1" thermoplastic housing, with protective rubber holster.

Readout in nW, μW, mW + dB/dBm

All Cercis 610 optical power meters include auto-ranging readout in nW, μW & mW, as well as dB and dBm. Additionally, all power meters include an internal 9 V battery (≥ 50 hrs. operation) plus AC port. Four detector options are available: 2 mm InGaAs (610i) for +5 to -70 dBm (3 mW to 0.2 nW) power input over 850–1625 nm; 2 mm High Power InGaAs (610ih) for +23 to -45 dBm (200 mW to 25 nW) power input over 1300–1625 nm; 3 mm Germanium (610g) for +5 to -50 dBm (3 mW to 10 nW) over 750–1800 nm; and 3.5 mm Silicon (610s) for +6 to -60 dBm (4 mW–1 nW) over 350–1100 nm range. Each of these is offered with standard NIST-traceable calibration points; however, custom calibration wavelengths—up to 8 per instrument may be selected.



Responsivity vs. Wavelength
Model 610g (Ge), Model 610i (InGaAs), Model 610s (Si)

Cercis Part Number Description—Benchtop				MMMM	T	X	L	M	D	C	A
Model No. (MMMM)	Model										
Source (T)	6120	Source									
Modifier / Dash (X)	6130	S Single LS	Modifier								
LS Optical Port (L)	6140	D Dual LS	- LS Std. Pwr.	LS Optical Port							
Modifier (M)	6150	T Tri (3) LS	X Non Std Power	A = Adapter PC (specify 1/port)	Modifier						
Detector (D)		Q Quad LS		B = Adptr APC	- Std.	Detector					
Calibrations (C)				F = Fixed FC/PC	X = NonStd.	i InGaAs	Calibrations				
PM Port (A)				E = Fixed FC/APC		ih Hi-Pwr	3 = 3 cal	PM Port			
						S Silicon	4 = 4 cal	A = Adapter			
						g Germanium	8 = 8 cal				

Comparison of Data Logging Optical Power Meters

Manufacturer	Cercis	Noyes/Alcoa	Nettest	Tempo/Rifocs	Agilent
Model	610i-40-1NA	OPM5-3C	GN-6025	522B	N3970A
Detector Type/Size	InGaAs 2 mm	InGaAs 1 mm	InGaAs 1 mm	InGaAs 1 mm	Germanium 2 mm
Range (dBm)	+5 to -70	+5 to -70	+5 to -70	+3 to -75	+5 to -70
Calibrated Wavelengths (nm)	850, 1310, 1550, 1625 *	850, 1300, 1310, 1550	850, 1300, 1310, 1550	850, 980, 1310, 1480, 1550, 1625	850, 1300, 1310, 1550
Modes (autoranging)	dB, dBm, n/μmW	dBr, dBm, n/μmW	dBr, dBm	dB, dBm, p/n/μmW	dBr, dBm
Optical Port	Interchangeable Click-on/off; 1 incl.	Interchangeable Screw-on; separate	Interchangeable Screw-on; 1 incl.	Interchangeable Snap-on/off; 1 incl	Interchangeable Screw-on; 1 incl.
Display	Graphic LCD contrast adj	4 digit LCD	4 digit LCD	LCD backlit 2.5X2"	LCD backlite
Resolution/Accuracy (dB)	±0.01** ±0.25	±0.01 ±0.25	±0.01 ±0.25	Selectable ±0.25	±0.01 ±0.3
Battery Type/Hrs	9 V*** / 50 hrs.	9V / 30 hrs.	2 AA*** / ~ 0 hrs.	4 AA*** / 14 hrs.	2 C*** / 250 hrs.
Record Storage	1000	500	900	1000	
Size (inches)	5.5 X 3.1 X 1.6****	5.5 X 3.2 X 1.5	6.3 X 3.3 X 1.3	7.6 X 4.3 X 2.3	7.9 X 5.4 X 2.9
Price	\$950	?	\$1050	\$1450	\$1440

Long Distance Fault Finder—1310 or 1550 nm—Model 60

Cercis Model 60 Long Distance Fault Finder enables location of fiber breaks, faulty splices or identification of fibers within a multi-fiber cable, on multi-kilometer lengths of singlemode or multi-mode fibers. The Class 1 transmitter launches -3 to -13 dBm (0.5 mW to 50 μW) 500 Hz signal of either 1310 or 1550 nm light into the fiber under test. The detection wand is then moved along the length of the tested fiber or placed at its output. When the 500 Hz signal is detected either at a break, microbend, or at the fiber output, the LED of the detection wand illuminates continuously, accompanied by an audible tone

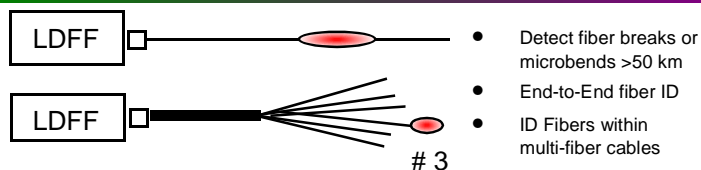
The FiberTracker can be used to locate faults over long distances, and may be used with any color plastic (PVC, PUR, PTE) sheathed cable. All instruments are available immediately. The transmitter includes four NiCd 1.5 V AA rechargeable batteries; the detection wand uses an alkaline AA battery. The Model 60 is supplied in a rugged case, including transmitter, detection wand, NiCd battery recharger and ST:ST jumper test cable. Pricing \$1600 or \$1800.



Cercis Model 60 FiberTracker

*Custom calibrated wavelengths also available, up to 8 / instrument.
 **Resolution over entire dynamic range.
 ***AC adapter available
 ****Holster & adapter included.
 Information accurate to the best of our knowledge; specs obtained from publicly-available documents. Corrections will be made upon receipt of published data sheet from manufacturer.
 dBr = relative logarithmic dB

Uses for a Visual Fault Finder



Accessories—Bare Fiber Adapters, Mating Sleeves, Jumpers

Part No.	Description
B128FC, B125FC	FC Bare Fiber Adapter (SM/MM)
B125ST	ST Bare Fiber Adapter (SM/MM)
B125SC	SC Bare Fiber Adapter (SM/MM)
BA-FC	FC:FC Mating Sleeve (SM/MM) 2-D, Zir SS
BA-ST	ST:ST Mating Sleeve (SM/MM) Zir SS
BA-SC	SC:SC Mating Sleeve (SM/MM) Zir SS
BA-FC/ST	FC:ST Mating Sleeve (SM/MM) Zir SS
FC-1H1-FC	FC:FC Jumper, 1 m 9/125/900 μm SMF

To assist its customers with measurement of optical components, Cercis provides accessories for use with fibers and connectors. Items such as bare fiber adapters, standard and hybrid mating sleeves, jumpers and custom assemblies are supplied from stock or by request. To

To prevent scratches, it is advisable that bare fiber adapters be mated to jumpers rather than to instruments directly. Bare fiber adapters allow the user to strip the fiber, insert it into the adapter, then cleave it—providing a quick fiber termination. However, the cleaved fiber could damage a mated component.



Cercis Bare Fiber Adapter



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**Putting Light
to the Test**

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

Add to Mailing List/Corrections

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.

Tell us about a product which would be useful to you and why.

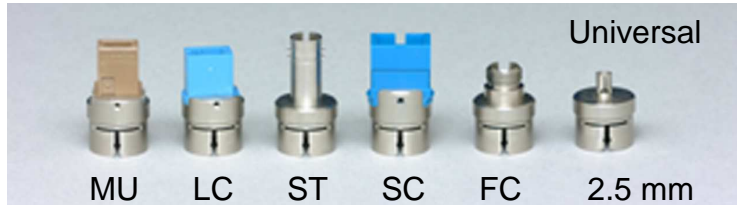


Cercis Logo Featured by LANDS' END

Cercis logo appears on page 25 of LANDS' END Winter 2001 Corporate Sales Catalog. Visit www.landsend.com/corpsales or call 800-338-2000.

Interchangeable Optical Adapters

Although interchangeable adapters for light sources and power meters are similar, they cannot be switched. The light source adapters have a large drilled hole to accommodate a split sleeve—simulating a connector mating sleeve. For 1.25 mm or other ferrules, a hybrid jumper or adapters can be used. The power meter adapters have a small drilled hole which stops the connector ferrule at a set distance from the detector—preventing damage to the window.



Connector	Light Source	Power Meter	Comments
2.5 mm	LS101	PM101	Compatible FC, ST, SC & any 2.5 mm ferrule
FC	LS102	PM102	PM: PC, APC, UPC LS: PC, UPC (APC order)
ST	LS103	PM103	PM: PC, APC, UPC LS: PC, UPC (APC order)
SC	LS104	PM104	PM: PC, APC, UPC LS: PC, UPC (APC order)
LC	LS105*	PM105	PM: PC, APC, UPC LS: PC, UPC (APC order)
SMA	-	PM106	PM: SMA connector

*Light sources using 1.25 mm connectors must be used only for those connectors; not interchangeable with 2.5 mm

CONVERSION CHART AVAILABLE Pick up a handy Watts to dBm conversion chart—a convenient reference for anyone needing to calculate optical power in Watts from the dBm readout of power meters without Watt option. Or contact Cercis by phone, fax or EMAIL to request a conversion chart.

International 90-264V AC Interchangeable Adaptor Available

Cercis provides an interchangeable AC adaptor which is able to accept AC currents 90–264 V. The adaptor is supplied with interchangeable plugs, compatible with US, Europe, UK and Australian configurations.

The A605 is a standard AC power supply with a negative center plug compatible with Cercis test instruments.

Interchangeable plugs compatible with US (A605A), UK (A605K), Europe (A605E) and Australia (A605S) electrical configurations snap on or off. Once the proper plug is attached, just plug it into the outlet and you're ready to use your Cercis power meter, light source of visual fault finder with any 90-264V AC worldwide.



Cercis A605 Interchangeable Adaptor – 90-264V AC, 47-63 Hz, 9V DC

Features	Safety Approvals
Double Insulated	UL 1950, Class 2
Power-On LED	CSA 22.2 M950
Class B EMI	TUV EN60950 (In Process)