



# Cercis



# Beacon

## Putting Light to the Test

Volume 6, Issue 1

### Cercis, Inc.

October 27, 2006

## Model 610 Data Logging Optical Power Meter—Get Yours Now!

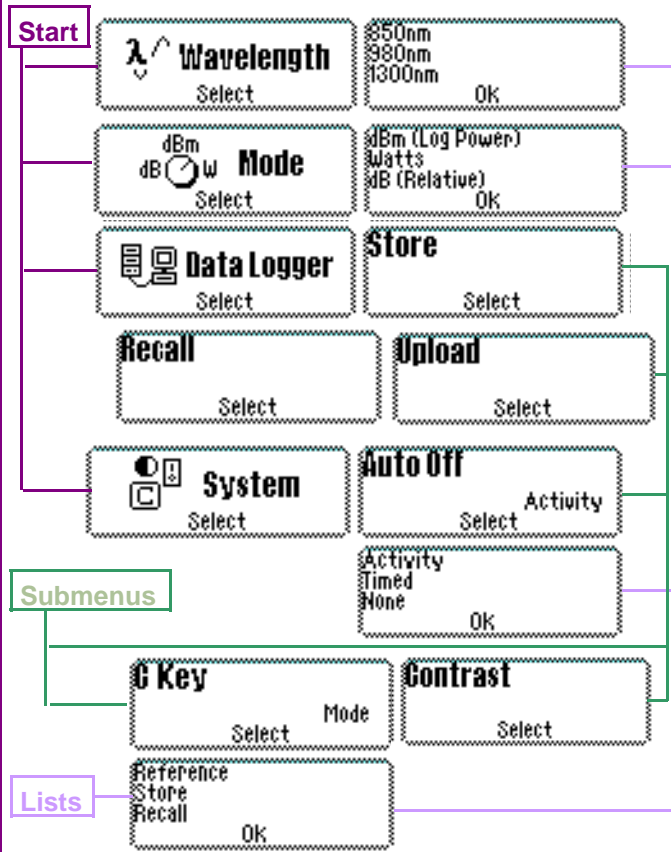
Cercis Model 610i data-logging optical power meter is a compact, versatile instrument—available from stock. Other versions—610S (Silicon 350-1100 nm); & 610iH (High Power InGaAs) - are also available All Cercis power meters include autoranging read-out in nW,  $\mu$ W, & mW + dB & dBm with reference store—plus a graphic display, interchangeable adapter port, and 9V battery + AC port. Included with each 610 power meter is: one interchangeable adapter (user can specify any one—see adapters on reverse), a RS232 shielded DB9-to-3.5 mm male plug 1 meter cable, and instruction manual.

The 610 OPM is versatile for use in quality control, manufacturing or engineering environments. Data transfer to printer or PC is possible via an RS232 port. Additionally, the instrument may be controlled via standard PC software—such as LabView<sup>®</sup>, Visual C<sup>®</sup> or Visual Basic<sup>®</sup>—to perform repetitive measurements.



Model 610 Power Meter

### 610 Menus, Submenus & Lists



Cercis 610 Series Data Logging Optical Power Meters are full-feature hand-held instruments which can store and recall up to 1000 separate data records—containing unique user-assigned label, power reading, reference value, calibration wavelength, operating mode, data and time — in the instrument's non-volatile memory.

#### Features

- 3 Modes: nW, mW, mW, dBm & dB with Relative Store
- Input Range: +5 to -70 dBm (610i—varies by detector type)
- Digital Calibration (up to 8+ calibration points per meter)
- Easily Readable Graphic Display, adjustable contrast

The 610 combines a state-of-the-art microprocessor with a graphic display. Operation is simple with 5 menu keys: ON/OFF, START, C, U and D. A menu, submenu and list allows the user to label, store and recall measurements as needed.

**Custom/OEM Requirements Welcome.**  
If you have a custom requirement for a fiber optic, medical, sensor, industrial or military application, please contact us. We have done custom meters for tactical and military multifiber connectors, a fiber-coupled instrument to replace a range finding laser, & 10 mW multi-laser station for 40 Gb/s detector screening.

All models are supplied with one adapter (default is 2.5 mm universal); others available separately.



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**Putting Light  
to the Test**

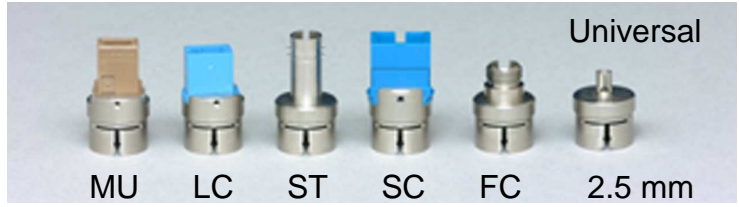
*We're on the Web! www.cercis.com*

### Mailing List/Corrections

Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_ FAX: \_\_\_\_\_  
 EMAIL: \_\_\_\_\_  
 Primary Function: \_\_\_\_\_  
 Light Source \_\_\_\_\_ OPM \_\_\_\_\_ VFF \_\_\_\_\_  
 Have a Cercis representative contact me.  Add to mail list.

### 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

Manufacturer	Cercis	AFL/Noyes	EXFO	Tempo/Rifocs	Agilent
Model	610i-40-1NA	OPM5-3D	EPM502	522B	N3970A
Detector Type/Size	InGaAs 2 mm	InGaAs 1 mm	Germanium	InGaAs 1 mm	InGaAs
Range (dBm)	+5 to -70	+10 to -70	+6 to -60	+3 to -75	+5 to -70
Calibrated Wavelengths (nm)	850, 1310, 1550, 1625 (up to 12 user-selectable)	850, 1300, 1310, 1550, 1625	850, 1300, 1310, 1490, 1550, 1625	850, 980, 1310, 1480, 1550, 1625	850, 1300, 1310, 1550
Modes (autoranging)	dB, dBm, n/μ/mW	dB, dBm, μW	dB, dBm, W	dB, dBm, p/n/μ/mW	dB, dBm, n/μ/mW
Optical Port	Interchangeable Click-on/off; 1 incl.	Interchangeable Screw-on; separate	Interchangeable Screw-on FC, ST or SC.	Interchangeable Snap-on/off; 1 incl	Interchangeable Screw-on; FC, SC, ST
Display	Graphic LCD contrast adj	LCD backlit	LCD backlit	LCD backlit 2.5X2"	4-digit LCD backlit
Resolution (dB) Accuracy (dB)	±0.01 ±0.25	±0.01 ±0.25	±0.01 —	Selectable ±0.25	±0.01 ±0.3
Battery Type/Hrs	9 V (opt. AC) / 50 hrs.	2 AA / 300 hrs.	Rechargeable	4 AA or NiMH / 14 hrs.	2 C (opt. AC) / 250 hrs.
Records (Data Transfer)	1000 (RS-232)	500 (RS-232)	1000 (USB)	1000 (RS-232)	950 (RS-232)
Size (inches)	5.5 X 3.1 X 1.6 (incl. holster)	5.5 X 3.2 X 1.5	7.5 X 4.0 X 2.5	7.6 X 4.3 X 2.3	7.9 X 5.4 X 2.9
Price	\$750	\$850	\$1500	\$995	\$1517 (MSRP)

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.

### 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 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