2.1 Power Meters

2.1.1 Centauri

Feature Rich Touchscreen Laser Power/Energy Meter

- Compatible with all standard Ophir Thermal, BeamTrack, Pyroelectric and Photodiode sensors
- Large 7" Full Color Touch Display
- Single and Dual Channel models available
- Choose between Digital with Bargraph, Analog Needle, Line Plot, Pulse Chart, Pass/Fail, Position, Stability, and Real Time Statistics displays
- Dual Channel Instrument supports Split and Merged Graphical Displays
- Sophisticated power and energy logging, including logging every point at up to 10000Hz with Pyro sensors
- Math functions for advanced processing such as Density, Scale Factor, Normalize against base line, etc. Functions can be mixed together and the results displayed graphically. Function results can also be logged
- Math Channel allows comparison of the measurements of the two channels
- Field upgrading of embedded software via USB Flash Drive
- USB Flash Drive for nearly unlimited data storage
- Pulsed Power measurements with Thermopile detectors
- Exposure measurement (Energy Summing) with Photodiode and Pyroelectric sensors
- Compact desktop design with rubberized bumpers and optimized kickstand
- Backlighting and rechargeable battery
- Scalable Analog Output, TTL Output and External Trigger Input
- Loudspeaker for Audio Warnings
- Future (Q2 2019): USB, RS232 and Ethernet interfaces with StarLab PC application and User Commands (see User Commands document in website)

Centauri is the most feature rich desktop laser power/energy meter on the market. Just plug in one of the many Ophir sensors and you have a whole measurement laboratory at your fingertips. The bright color display gives unparalleled legibility and ease of interpreting information. Centauri has many on board features such as laser tuning, data logging, graphing, normalize, power or energy density, attenuation scaling, max and min limits. Centauri can also display the power or energy as a high resolution simulated analog needle display.

Centauri can be either battery operated or from an AC source with the charger plugged in at all times. Its bright display and user-selectable color format enables ease of use in dark room conditions or when wearing protective glasses.

The Centauri's dual channel capabilities enable the user to simply plug in any of Ophir's thermal, pyroelectric or photodiode sensors and measure the two channels independently, or a comparison between the two channels.

Centauri Screen Layout

The Centauri's 7" touch-screen provides ease-of-use at the tap of a finger. The display is carefully designed to provide easy reading of the laser measurement, quick access to configuration parameters as well as the ability to set up for more advanced work.

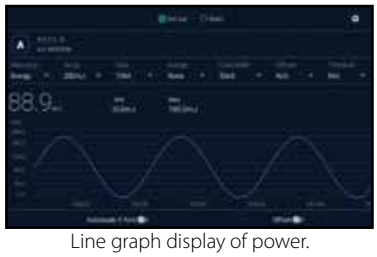
Info Panel. Includes channel (A or B), sensor name, and serial number. Tap the menu icon at the right to easily access more functionality.

Sensor Settings. Displayed on screen and easily updated. Tap on a parameter to open a window that displays all of the options. Tap on the desired setting to reconfigure and get back to work. Settings are stored in the sensor's memory as the startup settings for the next measurement session.

Measurements. Numeric and Graphical display of reading. Tap Offset to reduce ambient environmental effects on the readings. Tap Zoom to focus the bargraph around the present measurement.

Selected Screens

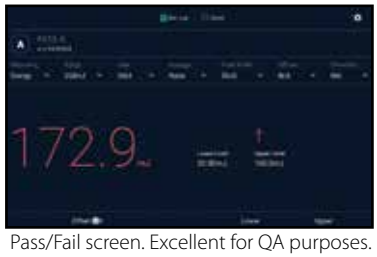
Analog needle display of power
Persistence and min/max tracking.



Line graph display of power.

Pulse chart display of energy.

Display statistics of the present
measurement session.

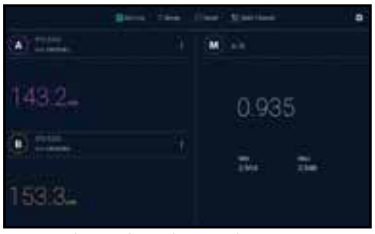


Pass/Fail screen. Excellent for QA purposes.

Power, Position, and Size measured with a
BeamTrack sensor.

Two independent channels of
measurement.

Two channels merging into one graph.



Two channels with a math comparison
channel.

Specifications

Power Meter	Brilliant color touch-screen TFT 1064 x 600 pixel graphics LCD. Large 16mm digits.
Features	Many screen features including power with bargraph, energy, average, exposure, frequency, graphs, scaling, special units, and more.
I/O's	User selectable 1,2,5 and 10 Volt full scale analog output; TTL Output; External Trigger Input; Loudspeaker for Audio Warnings
Screen Refresh	15 times/sec
Case	Molded high impact plastic with optimized angle kickstand. Rubberized sides for easy grip and protection against damage.
Size	Compact 49mm L x 200mm W x 130mm H (Weight 1kg)
Battery	Rechargeable Li-ion batteries with typically 6 hours between charges. The charger also functions as an AC adapter.
Multisensor Option	Two sensors can be connected and measure independently, and with a mathematical comparison.
Data Handling	Data can be viewed on board or transferred to PC: On Board: Data stored to USB Flash Drive (Thumb Drive) at rates up to 10,000 points/s.
Sensor Features	Works with Thermopile, BeamTrack, Pyroelectric (PE-C series) and Photodiode sensors. Automatic continuous background cancellation with PD300 sensors. Submicrojoule and multikilohertz capability with pulsed energy sensors.
Program Features	Preferred start up configuration can be set by user.

Ordering Information

Item	Description	Ophir P/N
Centauri Single Channel	Centauri high end power meter for Thermal, BeamTrack, Pyroelectric and Photodiode sensors	7Z01700
Centauri Dual Channel	Dual Channel high end power meter for Thermal, BeamTrack, Pyroelectric and Photodiode sensors	7Z01701
Centauri Dual Channel Activation Code	Software activation code to field upgrade a Single Channel Centauri to Dual Channel capabilities	7Z11056
Centauri Battery Pack	Replacement battery pack for Centauri	7E14009
N Polarity Power Supply/Charger	Power Supply/Charger AC/DC 12V 2A N-2.1x5.5 (1 unit supplied with Centauri)	7E05029
General Purpose I/O Connector	Used as analog output, external trigger output and TTL output plug (3 units supplied with Centauri)	7E02008