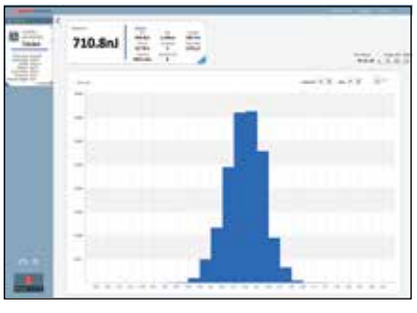
2.1.2 StarBright

Feature Rich Laser Power/Energy Meter

- Compatible only with all standard Ophir thermal, BeamTrack, pyroelectric (PE-C series only) and photodiode sensors
- Brilliant color large size TFT 320x240 display
- Choose between Digital with Bargraph, Analog Needle, Line Plot (for laser tuning), Pulse Chart, Pass/Fail, Position, Stability, Real Time Statistics displays
- Sophisticated power and energy logging, including logging every point at up to 5000Hz with Pyro sensors
- Math functions for advanced processing such as Density, Scale Factor, Normalize against base line, etc.
- Can mix functions together and display the results graphically. Function results can also be logged
- USB Flash Drive for nearly unlimited data storage
- USB and RS232 interfaces with StarLab PC application and User Commands (see User Commands document in website)
- LabVIEW driver and COM Object Interface
- Pulsed Power measurements with Thermopile detectors
- Low Frequency Power - power measurement from pulse cycle energy (for VCSEL)
- Exposure measurement (Energy Summing) with Photodiode and Pyroelectric sensors
- Select between English, Japanese, Russian, and Chinese interfaces
- Soft keys and menu driven functions with context sensitive help
- Compact handheld design with rubberized bumpers and optimized kickstand
- Backlighting and rechargeable battery
- Scalable Analog Output

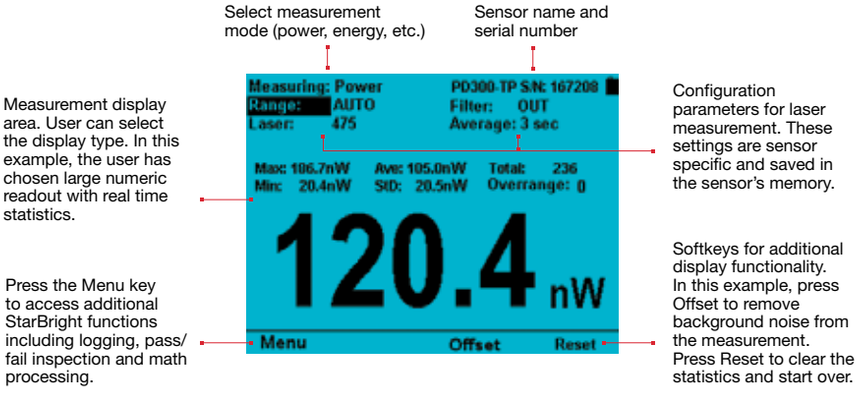
StarBright is the most feature rich handheld laser power/energy meter on the market. Just plug in one of the many Ophir sensors and you have a whole measurement laboratory at your fingertips. The bright color display gives unparalleled legibility and ease of interpreting information. StarBright has many on board features such as laser tuning, data logging, graphing, normalize, power or energy density, attenuation scaling, max and min limits. StarBright can also display the power or energy as a high resolution simulated analog needle display.
StarBright 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 built-in USB and RS232 interfaces and StarLab PC software allow display and processing of data either in real time or from previously stored data.
Results are displayed graphically on a PC. To support PC interfacing, LabVIEW drivers, a COM Object Interface and demo source code are provided.

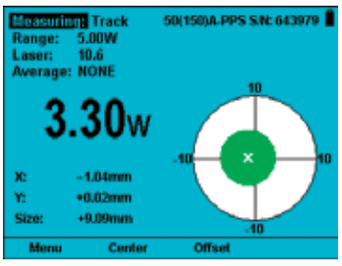
StarBright Screen Layout

StarBright screen ergonomics raise the user experience to new levels. 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.



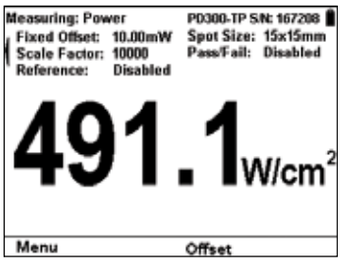
Selected Screens

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



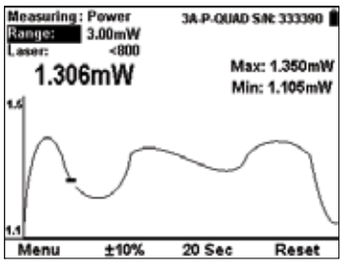
Power, Position, and Size measured with a BeamTrack sensor.

Bargraph display of energy. Colors set for work with protective glasses.

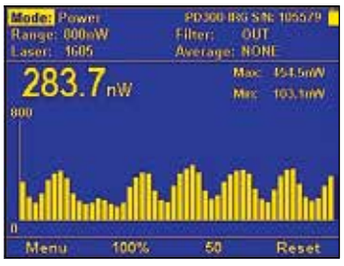


Power density measured after rescaling the power measurement.

Data logs filed to USB Flash Drive. Can be viewed in StarLab or Excel.

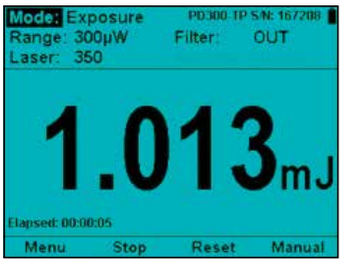


Line graph display of power. Wraps back to start for continuous display.



Pulse chart display of power.

Power measurement of laser pulse. For use with high-power pulsed lasers.



Exposure measurement (energy summing) with photodiode sensor.

Specifications

Power Meter	Brilliant color TFT 320 x 240 pixel graphics LCD. Large 16mm digits.
Features	Many screen features including power with multicolor bar graph, energy, average, exposure, frequency, graphs, scaling, special units, and more.
Outputs	USB, RS232 and user selectable 1, 2, 5 and 10 Volt full scale analog output.
Screen Refresh	15 times/sec
Case	Molded high impact plastic with optimized angle kickstand. Rubberized sides for easy grip and protection against damage.
Size	Folds to a compact 212mm L x 114mm W x 40mm H
Battery	Rechargeable Li-ion batteries with typically 8 hours between charges. The charger can be ordered from your local distributor. The charger also functions as an AC adapter.
Data Handling	Data can be viewed on board or transmitted to PC: On Board: Data stored to USB Drive (Thumb Drive) at rates up to 5000 points/s.
Sensor Features	Works with Thermopile, BeamTrack, Pyroelectric (PE-C series) and Photodiode sensors. Works with our PD300RM sensors.
Program Features	Preferred start up configuration can be set by user. User can recalibrate power, energy, response time and zero offset.
Compliance	CE, UKCA, China RoHS

Ordering Information

Item	Description	Ophir P/N
StarBright	StarBright universal power meter for Thermal, BeamTrack, Pyroelectric and Photodiode sensors	7Z01580
Carrying Case	Carrying case 38x30x11 cm. For power meter and up to 3 sensors	1J02079
StarBright USB Cable	USB-A to MICRO-B cable (1 unit supplied with StarBright)	7E01279
StarBright RS232 Cable	D9 to 3.5mm plug cable (1 unit supplied with StarBright)	7E01213
StarBright Battery Pack	Replacement battery pack for StarBright	7E14008
P Polarity Power Supply/Charger	Power Supply/Charger AC/DC 12V 2A P-1.35x3.5 (1unit supplied with StarBright)	7E05047
Standard Analog Output Connector	2.5mm mono jack (1unit supplied with StarBright)	7E02008