

# VEGA

## Color Screen Laser Power/Energy Display

- Compatible with all Ophir thermal, pyroelectric and photodiode heads
- Brilliant color large size TFT 320x240 display
- Compact handheld design with rubberized bumpers and optimized kickstand
- Choice of digital or analog needle display
- Illuminated keys for working in the dark
- Analog output
- Log every point at up to 4000Hz with pyro heads
- Non volatile data storage up to 200,000 points
- Laser tuning screen and power and energy log
- USB and RS232 output to PC with Statistics package
- NIST traceable and CE marked
- Soft keys and menu driven functions with on line help
- Many software features such as density, min/max, scaling etc.



The Vega is the most versatile and sophisticated handheld laser power/energy meter on the market. Just plug in one of the many Ophir smart heads and you have a whole measurement laboratory at your fingertips. The bright color display gives unparalleled legibility and ease of interpreting information.

Besides measuring power or energy from pJ and pW to hundreds of Joules and thousands of watts, the Vega has many on board features such as laser tuning, data logging, graphing, normalize, power or energy density units, attenuation scaling, max and min limits.

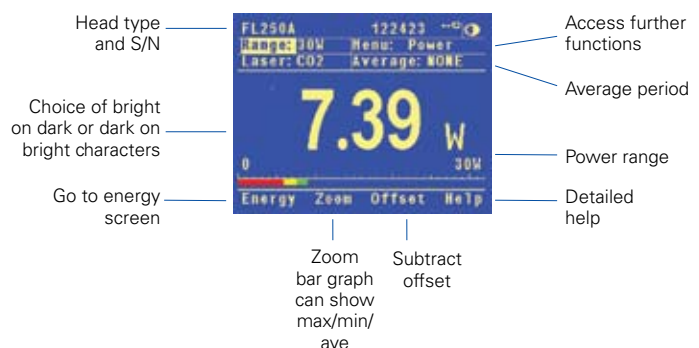
For those who prefer an analog display, the Vega can also display the power or energy with a high resolution simulated analog needle display.

The Vega can be operated either by battery or from an AC source with the charger plugged in at all times. Its bright display and backlit keys allow easy use in dark room conditions or with laser glasses on.

## Selected Screens

### Digital Power Screen and Color Functions

- Choice of bright on dark or Dark on bright characters
- Optimize colors for use with Laser eye protection glasses
- Can average over selected period. Useful for unstable lasers
- Bar graph can show max / min / average in different colors



## Analog Power Screen

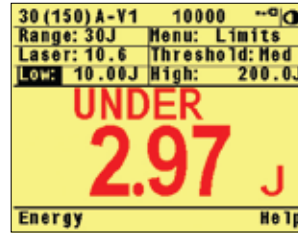
- Perfect for adjusting and maximizing laser power
- Persistent graphical display allows tracking of minimum maximum values measured
- Large analog needle with small digital display as well



Choice of smaller display with range, menu, laser and average headers.

## Energy/Limits Screen

- Pyroelectric heads (single or repetitive) and thermal heads (single shot only).
- Frequency measurement with pyroelectric heads.
- Limits screen with bright colored warning



Energy threshold

Energy range

## Energy Logging Screen

- Pyroelectric and thermal heads
- Continuous scroll with up to 100 points on screen
- Full statistics
- Store data onboard and recall

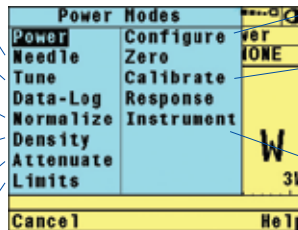


Enlarge variation pulse to pulse

## Additional Functions

- Press the menu choice on the main screen and many more options pop up as shown

- Choose analog needle screen
- Laser tune screen with continuous graph
- Normalize so present reading is 1.00
- Enter beam diameter and read in units of W/cm<sup>2</sup> or J/cm<sup>2</sup>
- Put in factor to read input power with attenuator or beam splitter
- Set for alarm if preset min or max limits exceeded



Set startup configuration

Adjust head calibration

Adjust head response time

Adjust display parameters

Return to previous menu

## Specifications

Display:	Brilliant color TFT 320 x 240 pixel graphics LCD. Large 16mm digits. High resolution analog needle also can be chosen.
Features:	Many screen features including power with multicolor bar graph, energy, average, exposure, frequency, graphs, scaling, special units, and more. Complete on line context sensitive help screens.
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 208mm L x 117mm W x 40mm H
Battery:	Rechargeable NiMH batteries with typically 18 hours between charges. Charger (included) also functions as an AC adapter.
Data Handling:	Both built in USB communications with data transmission rate of >4000 points/s and RS232 available with 19200 baud rate. Non volatile on board storage of up to 200,000 data points <sup>1</sup> in up to 10 files. Data can be viewed on board or transmitted to PC.
Head Features:	Works with thermopile, pyroelectric and photodiode heads. Automatic continuous background cancellation with PD300 heads. Submicrojoule and multikilohertz capability with pyroelectric heads.
Program Features:	Preferred start up configuration can be set by user. User can recalibrate power, energy, response time and zero offset.

Note 1: <sup>1</sup> software release storage of 50,000 points. Early 2009 software upgrade to 200,000 points

### Ordering Information

Item	Description	Ophir P/N
Vega	Vega color universal smart head display for thermal, pyroelectric and photodiode heads	7Z01560
Carrying Case	Carrying case 46x35x13 cm. For display and up to 3 heads.	1J02079
USB Cable for Vega	USB to mini DIN cable	7E01205
RS232 Cable for Vega	D9 to mini DIN cable	7E01206
Battery Pack for Vega	Replacement battery pack for the Vega	7E14007