Ophir smart displays are true plug-and-play instruments. With all head information and calibration stored in the head plug, just plug in any one of over 150 Ophir smart heads and the instrument is calibrated and configured to measure laser power and energy with that head.

NOVA

- Leading and most popular Ophir display
- Compatible with all Ophir heads: thermal, pyroelectric and photodiode
- Single shot energy measurement with thermal heads
- Optional RS232 computer interface with Windows software
- Power and energy logging with graphical display and statistics
- Power averaging
- Easy to use soft keys, menu-driven
- Screen graphics
- Backlight and rechargeable battery
- Analog output
- EMI rejection



Compatible with the complete range of Ophir thermal (power and energy), pyroelectric and photodiode heads, Nova is truly versatile: measuring from pW to KW, μ J tp 200J. With the optional scope adapter, you can connect your pyro head to an oscilloscope and see every pulse up to the maximum frequency permitted by the head.

Smart connector heads automatically configure and calibrate Nova when plugged in. Soft keys guide you through the screen graphics. Finished working? Your configuration can be saved for future use.

Nova's exclusive autoranging tune screen displays laser power graphically and displays maximum power. Zoom and time scale can be adjusted by user.

Selected Screens

Digital Power Screen

- CW industrial, medical and scientific lasers
- picoWatt to 20KW with appropriate heads

Laser Tuning Screen or Power Log Screen (not shown)

- Maximizing laser power
- User selected time period and zoom



Press Menu button or soft keys to make legends visible (not shown).



Press Menu button or soft keys to make legends visible.

| ±50% | Time | Exit |
|------|------------|------|
| Zoom | Sweep/Time | |





Laser wavelength Energy of last

pulse

Energy Measurement Screen

- Pyroelectric and thermopile heads-single pulse
- Pyroelectric frequency measurement (not shown)

Laser Units POWER E.LOG RANGE Units Soft key legends Change range Energy Log Screen Change to Power Measurement Flashes Ready for next pulse

Energy Log Screen

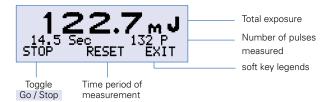
- Pyroelectric heads
- Thermopile heads-successive single pulses
- Continuous scroll
- Energy statistics

Pyroelectric Exposure Screen

- Sum or average energies over user selected time period / number of pulses
- Medicine, photolithography



Press Menu button or soft keys to make legends visible (not shown)



Average Screen

- Thermopile, photodiode and pyroelectric heads
- Periodic (1/3 sec to 30 sec) or continuous (10 sec to 1 hour) average for fast-changing or slow-changing laser



Specifications

| Display: | High legibility 32 x 122 pixel graphics supertwist LCD with switchable electroluminescent backlight. Large 12mm digits. |
|-------------------|---|
| Features: | Many screen features: including power with bar graph, energy, average, exposure, frequency, graphs, and more. Analog output 1V f.s. |
| Refresh: | 15 times / sec. |
| Case: | Molded high-impact plastic with kickstand and EMI conductive shielding, to allow use even in proximity to pulsed lasers. |
| Size: | Very compact: 203 x 95 x 38mm. |
| Battery: | Rechargeable 12 volts. 18 hours use between charges. Charger (included) also functions as AC adapter. |
| Head features: | Works with thermopile, pyroelectric, and photodiode heads. Automatic, continuous, background cancellation with PD300 heads. Submicrojoule and multikilohertz capability with model PE10 head. All heads use smart connector containing configuration information. |
| Program features: | Preferred startup configuration can be set by user. User can recalibrate power or energy. Response time. Zero offset. |

| Ordering Information | | | |
|--|--|-----------|--|
| Item | Description | Ophir P/N | |
| Nova | Nova universal smart head display for thermal, pyroelectric and photodiode heads | 7Z01500 | |
| Carrying Case | Carrying case 33x29x10 cm. For display and up to three heads | 1J02079 | |
| Nova/Orions RS232 assemblies - allow Nova display to communicate with PC and be controlled by PC | | | |
| Nova/Orion RS232 Assembly | RS232 adapter with standard 2 meter cable (including software) | 78105 | |
| Nova/Orion RS232 Assembly | RS232 adapter with 5 meter cable (including software) | 781052 | |
| Nova/Orion RS232 Assembly | RS232 adapter with 8 meter cable (including software) | 781051 | |
| Battery Pack | Replacement battery pack for Nova | 7Z11200 | |



