2.3 Software Solutions
2.3.1 StarLab

StarLab turns your PC into a laser power/energy multi-channel station

Extensive Graphic Display of Data
- Line Plot, Histogram, Bar chart, Simulated Analog Needle
- Multiple data sets on one graph or separate graphs on the same screen

Advanced Measurement Processing
- Power/Energy Density, Scale Factor, Normalize against a reference
- Multi-channel comparisons
- User defined mathematical equations: channels A/B, (A-B)/C etc.
- Position & size measurement with BeamTrack sensors

Data Logging for Future Review
- Can be displayed graphically or saved in text format
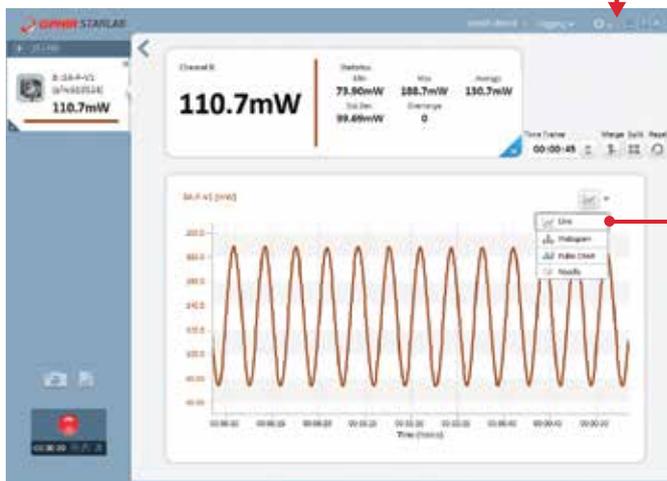- Easily exported to an Excel spreadsheet

Fully supports IPM, Ariel, Centauri, StarBright, StarLite, Vega, Nova II, Pulsar, Juno, Juno+, Juno-RS, Quasar and EA-1 devices with all standard Ophir sensors

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Flexible Display Options with StarLab
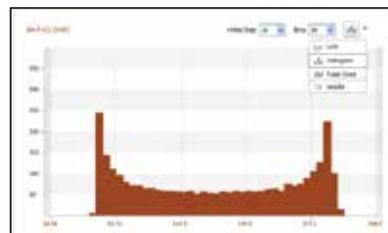
Choose which channels to display

Setup screen

You may choose to display them separately

Maximize one of the sources

One of the above screens is maximized

Choose line graph

or histogram

or needle display

For latest updates, please visit our website: www.ophiropt.com
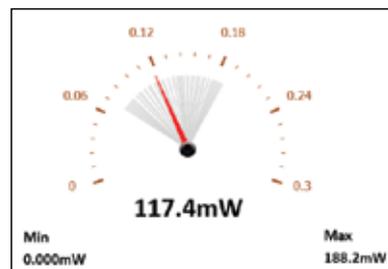
Multiple Sensors displayed together

Click on one of the channels   **The numerical values are from the channel chosen**

Here multi line graph display has been chosen

Settings and functions may be opened to adjust then minimized as needed

Additional functions are available from the "Functions" tab

Here multi line histogram display has been chosen

Power Meters

Functions and Logging

Functions

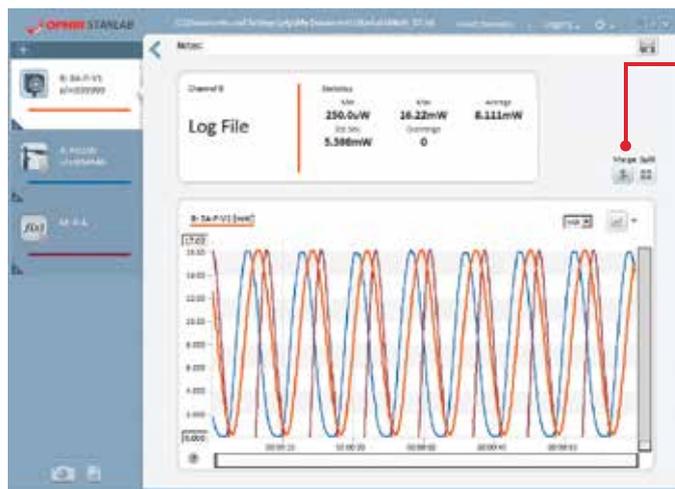Click on f(x) to open another trace combining measured values

Define function combining measured values

New trace is now added per defined function

Files are stored here. They may be viewed graphically OR numerically

Logging

Click on log button and logging of values starts


```
;PC Software:StarLab Version 3.00 Build 19
;Logged:25/05/2014 at 09:33:22
;Channel B:Vega Thermopile 3A-P-V1 (s/n:999999)  VG2.31 (s/n:657028)
;Channel A:Juno Photodiode PD300 (s/n:694646)  JN1.24 (s/n:606180)
;Math M:(A-B)^2

;Channel B:Statistics
;Min:3.440mW
;Max:12.22mW
;Average:7.882mW
;Std.Dev.:3.078mW
;Overrange:0
;First Pulse Arrived : 25/05/2014 at 09:33:22.562000
Timestamp    Channel B      F(B)          Channel A      Math M
    0.000    1.762e-002    6.620e-003
    0.064    1.836e-002    7.360e-003
    0.128    1.911e-002    8.110e-003
    0.136                                 1.067e-002    6.554e-006
    0.193    1.986e-002    8.860e-003
    0.203                                 8.480e-003    1.444e-007
    0.256    2.057e-002    9.570e-003
    0.269                                 6.540e-003    9.181e-006
    0.321    2.123e-002    1.023e-002
    0.354                                 4.900e-003    2.841e-005
    0.384    2.182e-002    1.082e-002
    0.406                                 3.550e-003    5.285e-005
    0.449    2.232e-002    1.132e-002
    0.865    2.291e-002    1.191e-002
    0.870                                 3.400e-004    1.339e-004
    0.928    2.258e-002    1.158e-002
    0.936                                 3.600e-004    1.259e-004
    0.993    2.216e-002    1.116e-002
    1.003                                 4.800e-004    1.141e-004
    1.056    2.164e-002    1.064e-002
    1.070                                 7.600e-004    9.761e-005
    1.120    2.104e-002    1.004e-002
    1.136                                 1.340e-003    7.569e-005
    1.184    2.038e-002    9.380e-003
    1.203                                 2.370e-003    4.914e-005
    1.664    1.558e-002    4.580e-003
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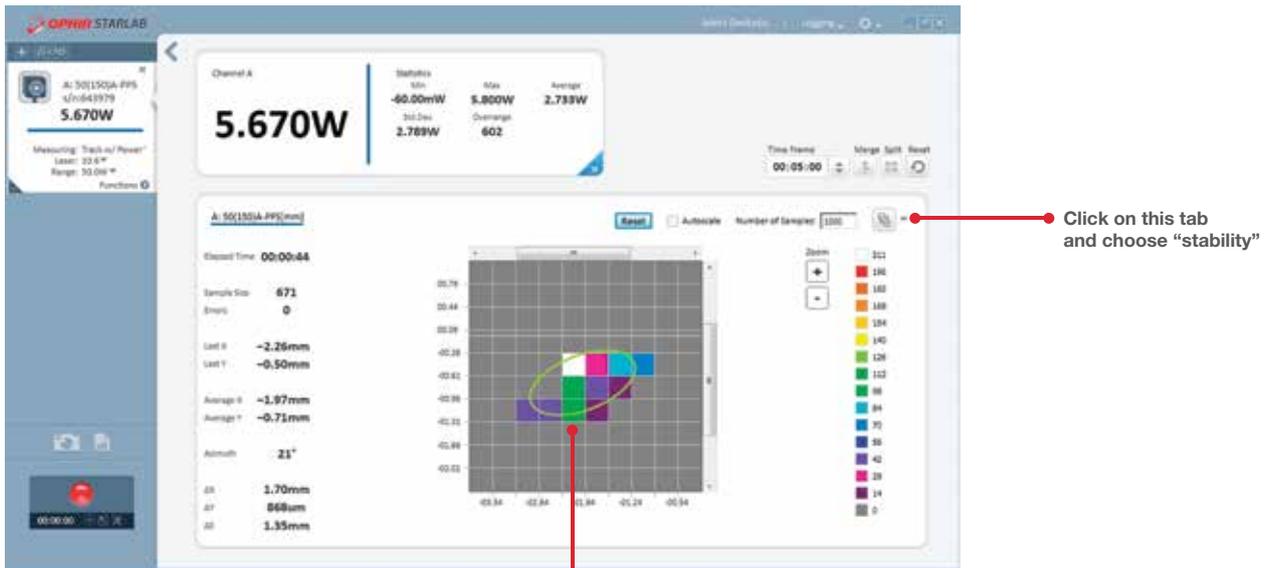
Power Meters

BeamTrack Power/Position/Size Screens

Open Measuring type tab and choose Track

Power

Position

Size

Power / Position / Size screen

Click on this tab and choose "stability"
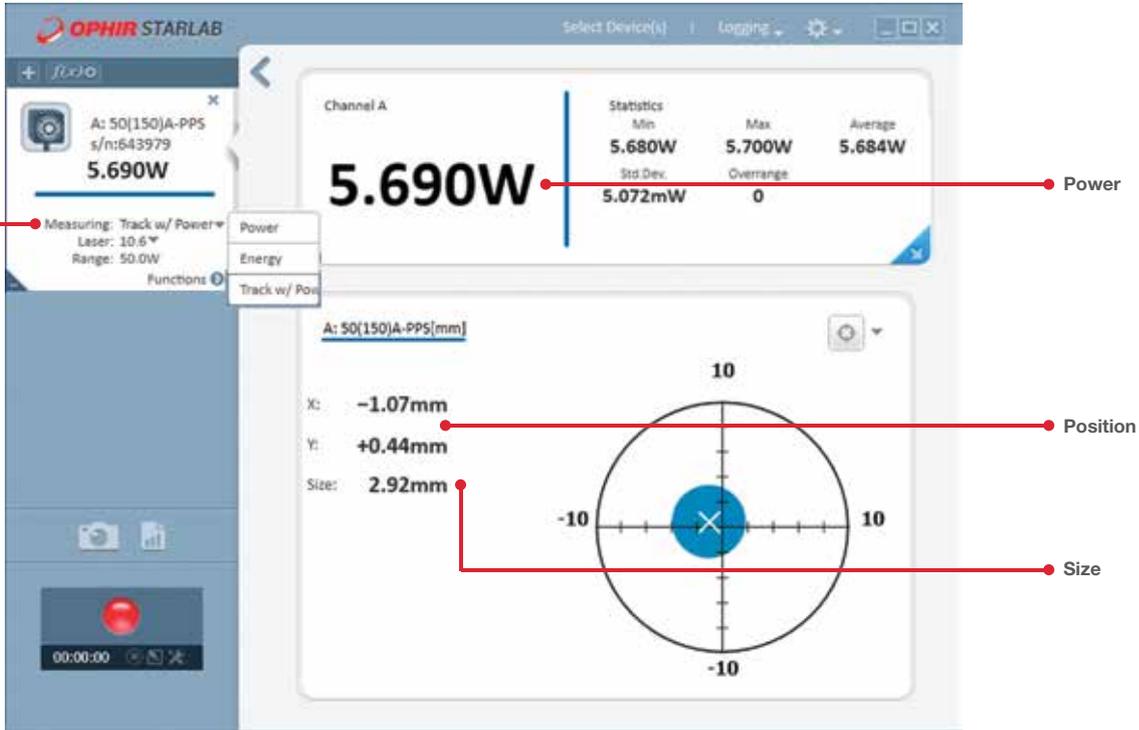
Position stability screen

Displays beam center wander weighted for dwell time at each position