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 StarBright, StarLite, Vega, Nova-II, Pulsar, Juno, Quasar, EA-1 and USBI devices with all standard Ophir sensors

Flexible Display Options with StarLab

You may choose to display them separately

Maximize one of the sources

or histogram

Choose line graph

Choose which channels to display

One of the above screens is maximized

setup screen
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.
## Functions and Logging

### Functions

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

### Logging

- Click on log button and logging of values starts.
- Files are stored here. They may be viewed graphically OR numerically.
- New trace is now added per defined function.

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**Log File**

<table>
<thead>
<tr>
<th>Timestamp</th>
<th>Channel B</th>
<th>Channel A</th>
<th>Math M</th>
</tr>
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<td>3.89e-03</td>
<td>6.38e-03</td>
<td>4.46e-07</td>
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<td>3/3/2018</td>
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BeamTrack Power/Position/Size Screens

Open Measuring type tab and choose Track

Power

Position

Size

Click on this tab and choose “stability”

Displays beam center wander weighted for dwell time at each position