

Getting Started with TDSPWR3

You can use this side of the Quick Reference to start to take measurements with the Power Measurement and Analysis Software (TDSPWR3). The other side contains a complete menu tree for TDSPWR3 software.

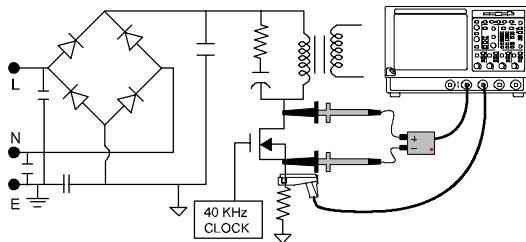
NOTE. For complete operating instructions and General Safety information, refer to the Online Help for the application.

The TDSPWR3 Power Measurements and Analysis software transforms a digital oscilloscope into an analysis tool that measures and analyzes power dissipation in power supply switching devices and magnetic components. It then generates detailed test reports in customizable formats.

Performing a Switching Loss Measurement

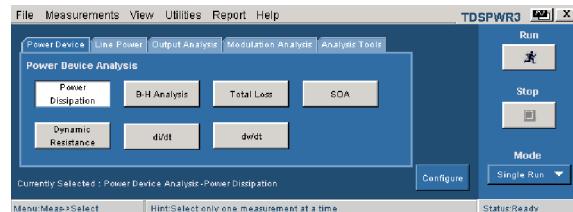
To measure Switching Loss, follow these steps:

1. Select File> Run Application> TDSPWR3 in the oscilloscope menu bar.
2. Connect the probes to the device under test. For example, the test setup for Switching Loss is shown below.



WARNING. When connecting to a circuit with hazardous voltages, refer to the warnings for the individual products and verify that the probes and other components are used within their ratings.

3. In the Power Device tab, select Power Dissipation. Press Configure.



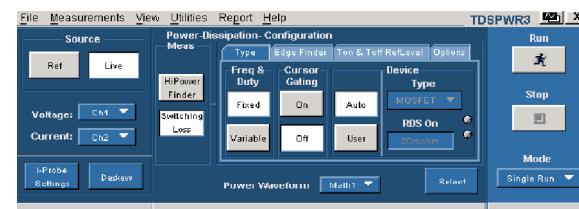
For up-to-date information on Tektronix oscilloscope solutions for Power Measurement, access the www.tektronix.com/Measurement/scopes web page.

TDSPWR3 Ordering Information

This application supports the TDS5000B, TDS6000¹, TDS/CSA7000B¹, and TDS/CSA7000¹ series oscilloscopes; refer to the *Optional Applications Software on Windows-Based Oscilloscopes Installation Manual* for a complete list of supported models. The applications CD includes a PDF file of the installation manual.

If you order Option PW3 along with TDS5000B, TDS6000, TDS/CSA7000, and TDS/CSA7000B the Power Analysis and Measurements Software will already be installed and enabled.

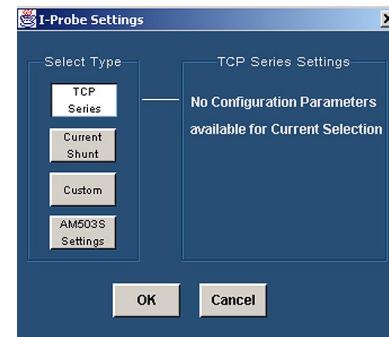
4. Select the Switching Loss option.



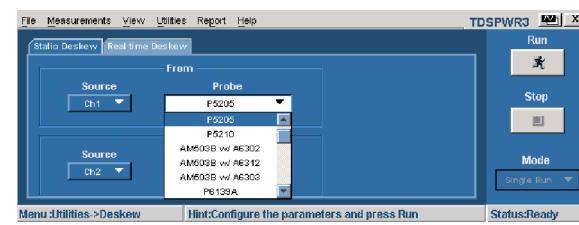
5. Configure the options in the common configuration panel.



6. Select the Source and assign the Voltage and Current channels.
7. Set the appropriate I-Probe settings.



8. Select the Deskew option or select Utilities>Deskew to deskew.



To order an upgrade for an existing oscilloscope:

- Order TDS5BUP Option PW3
- Order TDS5UP Option PW3
- Order TDS7UP or TDS7BUP Option PW3
- Order TDS6UP Option PW3
- Order CSA7UP or CSA7BUP Option PW3

Recommended Accessories

Opt. 2M for TDS5000

Opt. 3M for TDS5000B

Opt 2M, 3M, 4M for TDS/CSA7000B

Deskew Fixture-067-1478-00

Current Probe-Order TCP202, TCPA300, TCPA400 or AM503B with A63XX probes

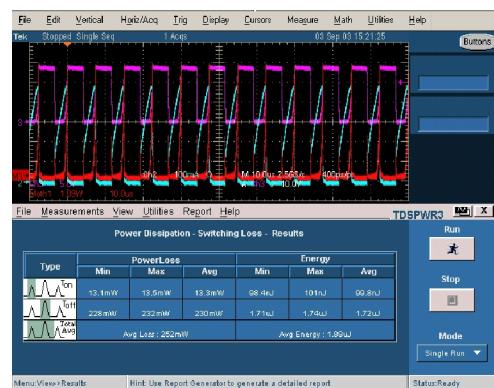
Differential Probe-Order P5205, P5210, P5200 and ADA400A

1Probe adapter: - TCA-1 MEG, while using 1 MΩ voltage probes with TDS6000, CSA7154, CSA7404B, TDS7154B, TDS7254B, TDS7404B, and TDS7704B

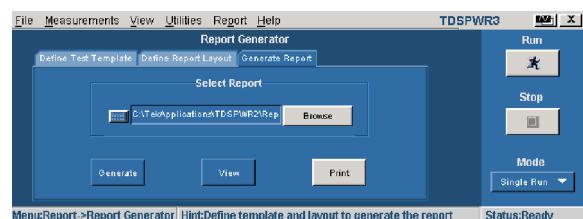
9. Push the “Running Man” button to start taking measurements. If the measurement is successful, the application automatically displays the results. You can also view the results by selecting View> Results from the application menu bar.



10. The application displays results for the measurement.



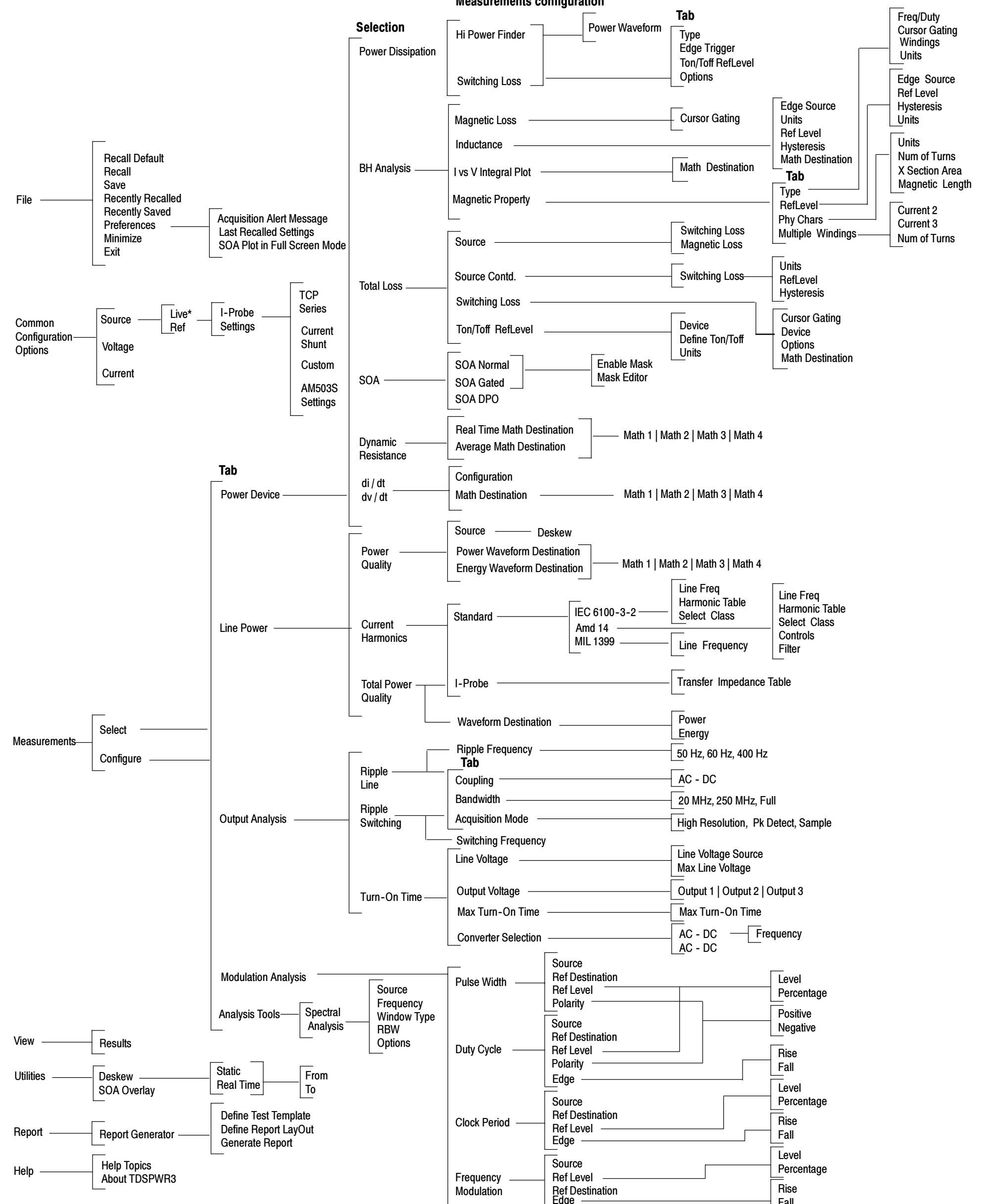
11. To generate a report, select Report> Report Generator.
12. Select the template in the Generate Report tab.
13. Select the Generate button to post the test data to the template.



TDSPWR3 Power Measurement and Analysis Reference



TDSPWR3 Menu Tree



* You can also select Math channels with Live signals.