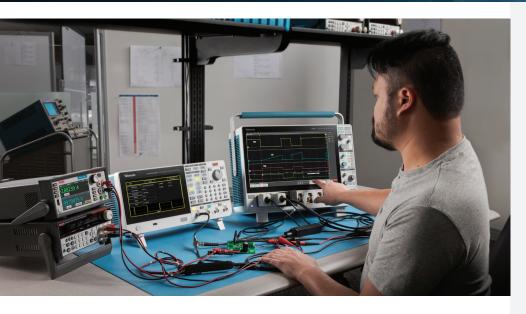
# **Tektronix**®

# Double Pulse Testing Solution for Wide Bandgap Power Semiconductors



New power converter designs, built around SiC and GaN MOSFETs, demand careful design and testing to optimize performance.

Double pulse testing (DPT) efficiently measures a range of important parameters during turn on, turn off, and reverse recovery. Setting up and performing these measurements can be done manually, but automation speeds up the process and helps promote accurate, consistent results.

Wide Bandgap Double Pulse Test software, integrated into the 5 Series B MSO, automates instrument setup and performs standard measurements for energy loss and timing. Smart differential voltage and current probes further simplify setups by communicating with the scope.

Together this system provides:

- Unique edge refinement algorithms to help analyze noisy waveforms
- 13 key measurements in accordance with JEDEC and IEC standards
- Intuitive configuration using the award-winning interface on the 5 Series B MSO

Other components may be added for more capabilities:

- An advanced Tektronix IsoVu<sup>™</sup> probe with extremely high common mode rejection can be added to uncover hidden details on high-side V<sub>GS</sub> measurements
- An Arbitrary Function Generator to serve as a double pulse generator
- Programmable DC Power Supply for gate driver power
- High voltage supply for  $V_{DD}$

Your investment is protected with three years of software updates, calibration and warranty included in the solution.

## Our most-recommended oscilloscope-based solution for double pulse testing, preconfigured as a single line item

This solution offers a full suite of instruments, software, probes and services to ensure precise measurements on wide bandgap devices and systems for faster, easier validation.

Increase your system performance and lower your time-to-market with:

- On-scope analysis conforming to JEDEC and IEC standards
- 1 GHz of bandwidth for accurate analysis of fast-switching signals
- Arbitrary Function Generator with built-in software for double-pulse testing waveforms
- High-side and low-side probes with high common mode noise rejection

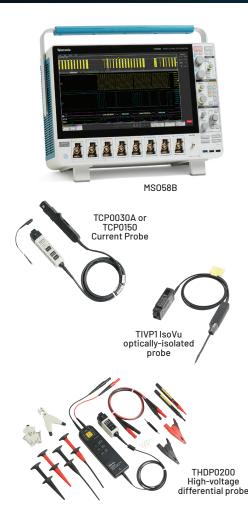


With TekScope PC Analysis Software your teams' PCs become an extension of the scope with the same analysis and measurement features.



TekDrive oscilloscope-specific cloud storage enables seamless collaboration between co-workers and teams anywhere in the world.

# SOLN-WBG-DPT Oscilloscope-based Solution for Double Pulse Testing





## SOLN-WBG-DPT includes:

#### 5 Series B MSO Oscilloscope, equipped with:

- 1 GHz bandwidth
- 8 input channels
- 5-WBG-DPT software for standards-compliant double pulse testing
- 5-PWR Advanced Power Measurements

#### Probes

- One THDP0200 High-voltage differential probe
- One current probe selected from either:
  - TCP0030A 30 A RMS 120 MHz TekVPI Current Probe or
  - TCP0150 150 A RMS 20 MHz TekVPI Current Probe
- Optional TIVP1 IsoVu optically-isolated probe to virtually eliminate common-mode noise

#### Double Pulse Waveform Generator (optional):

• AFG31252 Arbitrary Waveform Generator with 2 channels and Double Pulse Test software

#### Gate Drive Power Supply (optional):

• 2230-30-3 Programmable Power Supply, 195 W, 3 A, 30 V

#### High Voltage Supply (optional selection from the below options):

- 2260B-800-2 Programmable DC 720 W Power Supply, 800 V, 2.88 A
- EA-PSI 10000 Series Power Supply, up to 30 kW at 2000 V, 1000 A
- 2657A 3 kV 120 mA Source Measure Unit High Power SourceMeter®

#### Collaboration and Analysis Software

- TekDrive oscilloscope-specific cloud storage for seamless collaboration with up to 10 simultaneous connections (6 seats for 3 years)
- TekScope PC Analysis Software your teams' PCs become an extension of the scope with the same analysis and measurement features (6 seats for 3 years)

#### 3 years of worry-free software upgrades, calibration and protection

- 3-year calibration service. Includes traceable calibration or functional verification where applicable, for recommended calibrations.
- 3-year Total Product Protection/Extended Warranty, includes repair or replacement coverage from wear and tear, accidental damage, ESD or Electrical Over-stress.

## **ORDERING INFORMATION**

SOLN-WBG

Solution for WBG analysis (includes 5 Series B MSO oscilloscope, probes, applicable accessories, analysis software, calibration, extended warranty, pc analysis and cloud storage)

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