

9010 & 9010+ Multifunction Calibrators

FW Changelog

Version 2.016

- New feature: SCOPE Resistance mode that measures UUT input impedance.

Version 2.017

- Improved calibration of SCOPE Sine and SCOPE Resistance functions.

Version 2.018

- New feature: „free run“ mode added in Energy function.
- New feature: SCPI command indication in calibration menu.
- New feature: Editable current coil uncertainty.
- Major improvement of Capacitance specifications and update of Capacitance calibration procedure. Feature needs to be activated by Meatest Service Center, followed by full calibration of Capacitance function to take effect.
- Improved phase editor in Power function.
- Correction of GND indication in terminal diagram of SCOPE functions.

Version 2.019

- Improved calibration of high capacitance positions.

Version 2.020

- Improved user interface in AC Power Harmonic presets.
- Improved terminal indication in calibration mode.

Version 2.021

- Bug fix: Wrong date & time on startup.

Version 2.023

- Minor updates of Voltage from Current and DC Power functions.

Version 2.024

- Added sound indication when saving presets and calibration points.
- Bug fix: Inverted phase shift in 20mV and 200mV ranges.

Version 2.025

- New feature: Hazardous voltage. High voltage sound indication threshold is now adjustable. User may also define calibrator reaction to unintentional threshold breach.
- New feature: Global limits. User with password can define maximum voltage and current limits for all functions to prevent other users from outputting high voltages or currents from the calibrator.

Version 2.026

- Bug fix: Global limits no longer apply to calibration mode.

Version 2.027

- Extended both 20A DC & AC Current ranges to 20.5 A.
- Extended Variable Resistance range to 1.1 G Ω .
- Updated default current coil specifications to 0.3 %.
- Correction of on-screen period specifications in DC & AC Energy functions.

Version 2.028

- First version to support 9010+
- Improved SCOPE Sine linearity and accuracy below 300kHz, smoother output ramp-up, update of indicated specifications and calibration procedure.
- Correction of G2 thermocouple range.
- Correction of on-screen specification resolution and on-screen RTD simulator specifications.
- Correction of max amplitude setting in fixed 20mV and 20mA ranges.
- Bug fix: Voltage from Current mode amplitude setting in AC Power function.
- Bug fix: RES:LVOL:AMPL, RES:HVOL:AMPL and CAP:AMPL commands.

Version 2.030

- Correction of negative current on-screen specifications in DC and AC Current functions.
- Bug fix: double output frequency in four specific frequency values in AC Current function.

Version 2.031

- Extended frequency range in 9010+'s 30A AC Current range to 1 kHz.

Version 2.032

- Updated input check of LAN Host Name editor.

Version 2.033

- Updated RTD measurement calibration procedure.

Version 2.034

- Added SCPI commands for readout of secondary parameter specifications.
- Correction of 9010+'s Voltage, AC Current and Capacitance on-screen specifications.

Version 2.035

- Improved handling of overload conditions in 2W Resistance function caused by certain UUT measurement methods.

Version 2.036

- New feature: MENU > System > Specification > "Show specification on display" toggle.
- Major update of SCOPE LF Voltage function. High and Low modes merged into one and function was renamed to SCOPE Voltage. 200 Vpk output (formerly High mode) redirected to N-connector. Updated SCPI commands. Calibration of SCOPE Voltage function is required for full accuracy.

Version 2.037

- Updated TEMP:TCO:RJUN:EXT? command allows cold junction temperature compensator readout in calibrators with no MER option.

Version 2.038

- Minor improvements and bug fixes.

Version 2.040

- Improved accuracy of output current monitor in VAC function

Version 2.042

- New feature: TCP & UDP protocol support over Ethernet
- New feature: Cable compensation in Scope functions
- Minor improvements and bug fixes

Version 2.043

- Critical bug fix: OUTP command no longer interrupts output transition sequence and gets executed after the output transition.
- Added DISP:MET command for auxiliary meter readout, such as test voltage meter in HVR function, burden current meter in voltage functions, scope input resistance meter in SCOPE function, etc.
- Updated limits in auxiliary meter calibration points.
- TCP connection timeout extended to 600s.