

SSA5000A Firmware Revision History

Version	Revision
V1.9.0.2.3R10 2025/12/10	<p>Solved Issues:</p> <ul style="list-style-type: none"> • IQA Mode: Fix the issue of averaging invalidation. • MA Mode: Add the import/export function for constellation diagram editing configurations; Add some commands for setting APSK32 • NF Mode: Modify the minimum value of the frequency multiplication numerator/denominator to 1. • PU Mode: Not support negative pulses analysing, and convert them to positive pulses. • RTSA Mode: Add multiple marker display. • PN Mode: Fix the issue of Correction save failure after editing. • EMI Mode: Reset both RBW/Step to 1 when switching CISPR frequency bands, to avoid excessive data points. • SYS: Add option descriptions.
V1.9.0.2.3R2 2025/4/1	<p>New Functionality:</p> <ul style="list-style-type: none"> • MA mode adds APSK function; • Align adds an internal amplitude source switch; • VSA connection IQA function and corresponding new working modes. <p>Improvements:</p> <ul style="list-style-type: none"> • All modes: optimize UI refresh efficiency; • Solve the problem of mode switching crashes and reduce usage risks; • Limit modular rectification; • NF adds logic for calculating loss comp and adds a dialog box for editing the loss comp table. • NF mode: Add a quick input box to the ENR table; • Supports NTFS and exFAT USB formats. <p>Solved Issues:</p> <ul style="list-style-type: none"> • SA mode: Fixed the issue of calibration and reset failure immediately after setting the reference level offset; • EMI mode: Increase the Pscpi command to obtain the value of meter max hold: (:CALCulate:METER:PHOLD:POWER?) • PN mode: When the trace is not scanned, the problem of querying trace data with all zeros; • RTSA mode: After solving Preset, FPGA fails and waveform is abnormal; • PULSE mode: Modify the issue of failure to use machine buttons to press Marker and Peak; • NF mode: The problem of inconsistent values between the line chart and the table display; • MA mode: Fixed the issue where the equalization filter no longer scans at

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	<p>IFBW/20 level and above;</p> <ul style="list-style-type: none"> Various problem fixes for IQA mode: <ul style="list-style-type: none"> Set Preset Type to last, reset after restarting the machine, reset failed; The signal amplitude is incorrect, with a difference of about 15dBm from the signal source amplitude; Save IQ data in txt format file, display as empty on PC; Set the measurement time to 20ms or more, and the machine crashes; After switching from single to continue, the trace is not scanned continuously. After restart, the trace begins to scan continuously; The maximum frequency can only be set to 10GHz, and it is expected to be set to 28GHz; Power off and restart in IQA mode, default reset Last fails; IQA mode: solves the problem of the video trigger level being -17 and the trace still scanning in the non triggered state; The measurement mode of IQA needs to be placed in the second position of the measurement selection, and it is still in the last position.
V1.9.0.2.2R3 2025/1/20	<p>Solved Issues:</p> <ul style="list-style-type: none"> SA mode: The issue of the first point occasionally being abnormal during sweep.
V1.9.0.2.2R1 2024/10/22	<p>New Functionality:</p> <ul style="list-style-type: none"> Add user calibration for reference clock <p>Improvements:</p> <ul style="list-style-type: none"> SA mode: optimize refresh efficiency AMA mode: optimize AF smoothing effect NF mode: exporting table results as .csv files Add FTP switch function <p>Solved Issues:</p> <ul style="list-style-type: none"> SA mode: align estimated scan time and regular scan time BT mode: solve issues including Preset, EDR signal demodulation, and no response to quick operations PN mode: solve issues including signal averaging failure and incorrect sweep width NF mode: solve issues including calculation errors RTSA mode: solve issues including no waveform in screenshots, peak failure, failure to save and load files, and missing reference offset Add and modify SCPI commands: <ol style="list-style-type: none"> Period cursor reading error (:CALCulate:MARKer:FCOunt:X?) Query cursor function returns off (CALCulate:MARKer:FUNCtion?) Setting external trigger command is inconsistent with programming manual (:TRIGger[:SEQuence]:SOURce)

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	<p>4. Harmonic analysis command is missing to obtain each order harmonic frequency and power and obtain total harmonic distortion (:READ:HARMonics:AMPLitude:ALL? :READ:HARMonics:DISTortion?)</p> <p>5. SA command reads back cent, low, high.Q results when obtaining NDB results(:CALCulate:MARKer:BANDwidth:RESult?)</p>
V1.1.2.2.0 2024/1/17	<p>New Functionality:</p> <ul style="list-style-type: none"> • Add Phase Noise Measurement Mode • Add Noise Figure Measurement Mode • Add Pulse Measurement Mode • Add Blue Tooth Analysis Mode • Add AF spectrogram, SNR,Dist/Total,THD parameter analysis results in AMA Mode • Add image browsing in SYSTEM <p>Solved Issues:</p> <ul style="list-style-type: none"> • EMI mode Scan Only rescan with one less count issue • EMI mode sending command unable to rescan meter and Meas issues
V1.1.2.1.9 2023/11/4	<p>Improvements:</p> <ul style="list-style-type: none"> • AMA support demodulation time setting • SYS add Open Source Software declaration • SYS upgrade display progress bar and upgrade failure prompt, split display of version number <p>Solved Issues:</p> <ul style="list-style-type: none"> • GPSA error in waveform after automatic calibration • GPSA unable to send command to set fixed marker • GPSA rbw10hz zero sweep width waveform error • GPSA harmonic selection value mismatch, set to 1, SCPI query to 2 • AMA SINAD correction of calculation errors • AMA peak command missing completion • CCDF error in saving STA file • CCDF the default number of counts is incorrect • CCDF mark detaches from the trace after modifying the scale • CCDF frequency offset should not be added to the marker

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V1.1.2.1.8R6 2023/9/23	<p>Improvements:</p> <ul style="list-style-type: none"> Increased front protection AMA measurement Y-axis scale adjustable AMA measurement demodulation time is adjustable AMA measurement supports peak Optimization of ascending and descending order icons in peak table in SA mode SA marker cursor added prompt outside waveform area Restore the previous MEAS when SYS is powered on to last or user VNC interface optimization <p>Solved Issues:</p> <ul style="list-style-type: none"> SA rbw10Hz and RBW 1Hz noise floor difference is 20db processing SA zero span priority is greater than RBW manual SA small RBW does not scan problem fixed SA noise cursor modification RBW change problem handling SA automatic calibration amplitude compensation error in Trace View state Bug fix for DMA SCPI query demodulation type error Solving the problem of one less average number of times in IQ mode single There is no chance of response issues with HDMI connections
V1.1.2.1.7R3 2023/4/1	<p>Improvements:</p> <ul style="list-style-type: none"> Support EMI mode VNC interface optimization <p>Solved Issues:</p> <ul style="list-style-type: none"> The default detection type of the third-order intermodulation in SA mode is changed to Pos Fixed cursor readout update error when the readout type is not auto 10db higher signal amplitude under harmonic analysis Harmonic analysis cannot modify the number of harmonics MA mode time domain graph marker display unit corrected to dBV Solved the problem that FTP cannot be used
V1.1.2.1.5R1 2022/7/18	<p>Improvements:</p> <ul style="list-style-type: none"> SA mode optimizes the problem of large 3db bandwidth error under 1M RBW filter setting SA mode adds the function of integrating bandwidth linkage span change in ACPR, CNR, Channel power SA mode optimizes the marker display in the upper right corner, and displays all markers when the marker table is not opened SA mode optimizes the abnormal detection waveform with black vertical lines

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	<p>inserted</p> <ul style="list-style-type: none"> MA mode adds PM demodulation mode MA adds a command to switch between AMA and DMA LXI support <p>Solved Issues:</p> <ul style="list-style-type: none"> In SA mode, the problem of not scanning when triggering zero span and negative delay is corrected SA mode fixed the problem that FFT cannot be selected in Gate method In SA mode, the problem of loading scan points through the user configuration file is not loaded correctly In SA mode, the problem of spurious signals near 13G is corrected System fixed crash problem when loading through configuration file without a certain mode option System fixes the problem of white borders in reversed screenshots in ma mode UI fixes the afterimage problem when dragging controls
V1.1.2.1.3R2 2022/6/10	<p>Improvements:</p> <ul style="list-style-type: none"> SA mode optimization ref automatically adjusts the strategy modification of the Attenuator, and the Attenuator automatically steps down to 1 dB When optimizing Meas in SA mode, it also supports opening the Freq counter. <p>Solved Issues:</p> <ul style="list-style-type: none"> Fix the zero Span type when FFT in SA mode Fix the OPC response in EMI mode
V1.1.2.1.0 2021/4/7	This version is the first time introduced.