

SSA3000X-R Firmware Revision History

Version	Revision
V3.2.2.6.0R7 2023/4/10	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>New Functionality:</p> <ul style="list-style-type: none"> • Add ECal in VNA mode • Add three new formats in VNA mode: Unwrap Phase/Real/Imaginary • Add Z Reflection in VNA mode • Add PM demodulation in MA mode • The time of analog demodulation in MA mode is adjustable <p>Improvements:</p> <ul style="list-style-type: none"> • SCPI command for setting/obtaining the format Unwrap Phase/Real/Imaginary: CALCulate#[:SElected]:FORMat adds three new parameters for UWPH/REAL/IMAG SCPI command for setting/obtaining Z Reflection: :CALCulate#:TRACe#:CONVersion:FUNCtion OFF/ZREFlection • In VNA mode, when the format is Phase, the scpi command to read the marker y value: CALCulate#:FSCan:MARKer#:Y? returns the unwrap phase value in addition to the phase value • SCPI commands for Calibration: Select Open Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:OPEN Select Short Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:SHORT Select Enhance calibration [:SENSe#]:CORRection:COLLect:METHod:ENHanced Select Through Calibration [:SENSe#]:CORRection:COLLect:METHod[:RESPonse]:THRU Select 1 Port Calibration[:SENSe#]:CORRection:COLLect:METHod:SOLT1 • SCPI command for setting/obtaining the demodulation type: ADEMod:STYLe, new parameter is PM • SCPI command for setting the scan time in MA mode [:SENSe#]:SWEep:TIME • Add SCPI commands in MA mode: Get AM parameters: FETCh:AM#? Get FM parameters: FETCh:FM#? Get PM parameters: FETCh:PM#? • Add SCPI command: Exit remote status: SYSTem: LOCal <p>Solved Issues:</p> <ul style="list-style-type: none"> • Fix the problem that the bandwidth of the emi filter in SA mode • Fix the problem that setting the TG Level in SA mode may cause TG to have no output • Fix the problem that the n dB Marker measurement results in SA mode are inconsistent

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	<p>with the OBW measurement results</p> <ul style="list-style-type: none"> Fix the problem that there is an invalid frequency menu in Harmonic in SA mode Fix the problem that the SCPI command: READ:ADEMod? would return an invalid value when reading the analog demodulation measurement results in MA mode Fix the abnormality of the first scan in EMI mode Fix the problem that setting rbw may crash when qpd is not enabled in EMI mode Fix the problem of wrong reset when switching continue/single in RTSA mode Fix the problem that the 3D Spectrogram in RTSA mode will be abnormally full when pressing pause under continuous scanning Fix an issue where 'micro' relative units represented by 'u' were not recognized when reading files
V3.2.2.5.1R1 2022/5/10	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Optimize the Ref level and Att couple Add SCPI commands in MA Mode <ul style="list-style-type: none"> •READ:ADEMod:AVG? •[:SENSe]:ADEMod:FM:DEVI? •[:SENSe]:ADEMod:FM:DRIFt? •[:SENSe]:BWIDth[:RESolution] •[:SENSe]:BWIDth[:RESolution]? •[:SENSe]:BWIDth:EQLPf •[:SENSe]:BWIDth:EQLPf? •CALCulate:MARKer#:PTPeak Add Cable Atten to correct cable loss in DTF Mode Add .trc file in EMI Mode Add .lic file auto scan <p>Solved Issues:</p> <ul style="list-style-type: none"> Fix the false signals in density view in RTSA mode Fix pi/4 DPSK 和 pi/8 DPSK decode errors in MA mode Fix calibration error when port extension on in VNA mode Fix fft frequency error in narrow span in SA mode Fix trace avg calculation error in SA mode Fix the zero sweep type when fft in SA mode
V3.2.2.5.0 2021/9/30	<p>Notice:</p> <p>This firmware must be upgraded from V3.2.2.4.0 or later. If your analyzer has an earlier version, please update to V3.2.2.4.0 first and then proceed to update to the latest version.</p>

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	<p>New Functionality:</p> <ul style="list-style-type: none"> Add Ext Trigger Delay from 0-10 seconds in SA Mode Add Limit in Log mag and Lin mag format; add calibration average; add s1p touchstone file save in VNA mode <p>Improvements:</p> <ul style="list-style-type: none"> VNA sweep points up to 10001; Scale down to 0.001 in Smith chart; MA Filter type Nyquist change to Raised Cosine to align SCPI command; improve filter performance in low frequency EMI RBW/Step from 1 to 3 <p>Solved Issues:</p> <ul style="list-style-type: none"> SA: Fixed the difference between marker and peak and marker style; Center Freq error; Limit fail to stop error; Auto frequency error; In normalization, auto re-normalized after any setting changes VNA: Fixed Phase error; STA file saving error; CSA file loading error; S21 calibration error; Enhanced calibration error RTSA: Fixed continue peak preset error; freq step error EMI: Fixed frequency offset error; saving std lim path error Web browser: Fixed change IP error, Login error after changing password
V3.2.2.4.0 2021/1/15	<ul style="list-style-type: none"> Fix TG switch error at small RBW Fix Help and Limit file lost when Factory reset Fix Auto open delay unit error in VNA mode Fix CNR calc error when no peak found Fix OBW result overflow Fix Harmonic calc error at 100Hz RBW Fix Reflection Open+Short calibration action Fix spectrum amplitude error in DMA mode Optimize EMI .csv file content to all signal list Optimize EMI peak search Optimize Auto cal process Add Peak search to Spectrum in DMA mode This version can not be rolled back
V3.2.2.3.3R1 2020/12/01	<p>New Functionality:</p> <ul style="list-style-type: none"> Add EMI filter in SA for EMI option <p>Solved Issues:</p> <ul style="list-style-type: none"> Optimize the response in RTSA Optimize the TG flatness and control procedure Optimize Help Fix Correction, .csv file, add peak numbers to 20 in EMI mode

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	<ul style="list-style-type: none"> • Fix ADC overload warning error, and time unit error in Calibration in VNA Mode • Fix amplitude error in DMA Mode • Fix the frequency band downgrade to 3.2GHz on some units <p>Fix upgrade failure issue</p>
V3.2.2.3.2 2020/09/09	<p>New Functionality:</p> <ul style="list-style-type: none"> • Add VNA and DTF mode • Update EMI option to a new EMI measurement mode <p>Solved Issues:</p> <ul style="list-style-type: none"> • Fix bug in Help File • Fix some ADC overload warning • Fix some PvT and Density marker bugs. • Fix Ch Power calculation bug in small span in SA Mode • Fix amplitude bug in AMA Mode • Fix peak search bug in SCPI command