

# Internal Memory and Information Security in Signal Analyzer and Signal Generator

Signal Analyzer MS2830A / MS2840A / MS2850A

Vector Signal Generator MG3710A/E

Analog Signal Generator MG3740A

This document describes type and size of memory and storage device inside Anritsu Signal Analyzer and Signal Generator series in order to use safely the products against information security threat.

Signal Analyzer MS2830A has specified memory and storage devices inside the box as Table 1, then Signal Analyzer MS2840A and MS2850A have specified memory and storage devices inside the box as Table 2.

**Table 1 Memory Type and Size in Signal Analyzer MS2830A**

Function	Size	Type	Remarks
Work Memory with CPU	4 GB	DDR-SDRAM	Windows10 64 bit
	4 GB	DDR-SDRAM	Windows7 (WES7) 64 bit
	2 GB	DDR-SDRAM	Windows XP (WES2009)
Waveform (I/Q data) Memory for Signal Analyzer	1 GB	DDR-SDRAM	-
Waveform (I/Q data) Memory for Signal Generator	1 GB	DDR-SDRAM	(Option)
Communication Memory in COM-DSP	16 MB	DDR-SDRAM	-
Factory Calibration, License and other maintaince information	8 MB	FLASH	-
Main Storage for OS, application, waveform and user data	70 GB and over	HDD	-

**Table 2 Memory Type and Size in Signal Analyzer MS2840A and MS2850A**

Function	Size	Type	Remarks
Work Memory with CPU	8 GB	DDR-SDRAM	Windows10 64 bit
	8 GB	DDR-SDRAM	Windows7 (WES7) 64 bit
Waveform (I/Q data) Memory for Signal Analyzer	16 GB	DDR-SDRAM	MS2850A
	1 GB	DDR-SDRAM	MS2840A
Waveform (I/Q data) Memory for Signal Generator	1 GB	DDR-SDRAM	(Option for MS2840A)
Communication Memory in COM-DSP	16 MB	DDR-SDRAM	-
Factory Calibration, License and other maintaince information	8 MB	FLASH	-
Factory Calibration and FPGA configuration data	1 GB	FLASH	MS2850A
Main Storage for OS, application, waveform and user data	70 GB and over	SSD	-

Vector Signal Generator MG3710A/E and Analog Signal Generator MG3740A have specified memory and storage devices inside the box as Table 3.

**Table 3 Memory Type and Size in Signal Generator MG3710A/E and MG3740A**

Function	Size	Type	Remarks
Work Memory with CPU	4 GB	DDR-SDRAM	Windows10 64 bit
	4 GB	DDR-SDRAM	Windows7 (WES7) 64 bit
	1 GB	DDR-SDRAM	Windows 7 Pro 32 bit
	1 GB	DDR-SDRAM	Windows XP (WES2009)
Waveform (I/Q data) Memory for Signal Generator*	1 GB	DDR-SDRAM	For Memory A (standard)
	1 GB	DDR-SDRAM	For Memory B (option)
	4 GB	DDR-SDRAM	For Memory A (option)
	4 GB	DDR-SDRAM	For Memory B (option)
Communication Memory in COM-DSP	16 MB	DDR-SDRAM	n/a
Factory Calibration, License and other maintaince information	8 MB	Flash memory	n/a
Main Storage for OS, application, waveform and user data	70 GB and over	HDD	n/a

\*: The wavefor memory is double size in case 2<sup>nd</sup> RF option is installed.

In addition to the above tables, MS2830A, MS2840A, MS2850A, MG3710A/E and MG3740A can be installed optinal secondary storage device in HDD or SSD to store user data in 70 GB and over.

#### About Memory Type

- DDR-SDRAM and SDRAM are volatile memory. All data is lost at power off without security concern.
- Flash memory is non-volatile memory and keeps the data except user data after power off without security concern.
- HDD (Hard Disk Drive) and SSD (Solid State Drive) are non-volatile storage device and keep the data after power off.

## WARNING

Please make sure that all information that must saved and has been stored by yourself in the instrument is properly backed-up before clearing any instrument memory. Anritsu will not have responsible for any lost data.

In case that you lend or sell your test instrument, Anritsu recommends completely delete your data by using an application program supporting DoD5220 standard based on the NSA-approved algorithm for the security reason.