DATE: 09/19/2025
TITLE: Instrument Security Procedures for 4500B QSP-09-002 REV. NEW

Product Name: Boonton Electronics 4500B RF Peak Power Analyzer

Volatile Memory:

Main CPU board:	256MB Main Memory (SDRAM), 32MB Video RAM, 512KB CPU Cache
Motherboard:	None
Input board(s):	16MB Main Memory (SDRAM), 2MB Acquis. Memory (SRAM), 256KB Cache
GPIB board:	None
Calibrator:	64 bytes CPU memory (on-chip SRAM)
Keyboard:	512 bytes CPU memory (on-chip SRAM)
Display:	None
Hard Disk Drive:	2MB Read/Write Buffer (DRAM)
Peak Power Sensors:	None

Nonvolatile Memory:

Main CPU board:	128 bytes “CMOS SETUP” memory (battery backed up SRAM)
Motherboard:	16KB Factory Configuration Memory (EEPROM)
Input board(s):	16KB Factory Configuration Memory (EEPROM)
GPIB board:	None
Calibrator:	2KB Factory Cal Memory (EEPROM), 2KB Program Memory (on-chip EPROM)
Keyboard:	16KB Program Memory (on-chip FLASH)
Hard Disk Drive:	40GB OS, Data and Program Memory (Magnetic Media)
Peak Power Sensors:	2KB Factory Calibration Memory (EEPROM)

Security Summary:

The Boonton Model 4500B may save operating parameters and measurement information in various volatile memory locations, and one non-volatile location. All volatile memory is lost within one minute of removing instrument AC power. The only non-volatile location that is able to save user data is the hard disk drive. All other non-volatile locations are programmed at the factory or during instrument calibration, and do not save any user information. The following types of user information my be present on the hard disk drive: most recent operating configuration (“instrument setup”), user saved operating configurations, user saved waveforms, saved “memory channels”, user saved screen images, user saved measurement arrays. The hard disk drive also may contain the following calibration data from field calibration processes performed by the user: “autocal” sensor linearity data, sensor zero, trigger channel calibration data, timebase skew calibration data.

Security Procedures:

To declassify the Boonton Model 4500B, instrument power should be removed for a minimum of one minute, and the hard disk drive removed and replaced with a separate, programmed drive. This will result in the loss of any user “autocal” data for sensors and trigger channels, and timebase “skew” adjustments, but no factory calibration data will be lost.

A new drive service kit may be ordered from the Boonton Service Department as part number 96411401A. See document 83919800A “Boonton 4500B Hard Drive Replacement Procedure” for instructions (included with kit). The old drive may be destroyed, securely wiped, or re-used later if the instrument is returned to the classified area. However, since the drive and cable connectors are not meant for repeated mating cycles, it is recommended that the drive be replaced no more than five times.

9 Entin Road, Suite 101, Parsippany, NJ 07054 USA
+1 973 386 9696 +1 973 386 9191 sales@maurymw.com maurymw.com