Certificate of Volatility

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Equipment Names:	HMP350, HMP300 and DiVA
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Device memories

Volatile memory

Type	Size	User modifiable	Function	Process to sanitize
SDRAM	1024 MB	No	System memory	Power loss
SRAM	192 KB	No	CPU internal memory	Power loss
SRAM	1 KB	No	Power controller memory	Power loss

Non-volatile memory

Type	Size	User modifiable	System Data	User Data	Process to sanitize
FRAM	16 KB	No	Power controller firmware Hardware manufacturing and setup data Power controller logs	None	None
NOR Flash	1 MB	Yes	Bootloader Bootloader parameters	Kernel crash logs	System data cannot be sanitized. User data is to be sanitized as explained below.
eMMC (NAND Flash based)	16 GB	Yes	Recovery firmware System firmware Factory firmware image	User content System configuration System and user logs	System data cannot be entirely sanitized. User data is to be sanitized as explained below.

Non-volatile memory sanitization procedure

This procedure is to be followed to sanitize all user content, logs and configuration from the non-volatile memories of the unit. After completing the procedure, the firmware needs to be re-installed from the recovery console.

NOTE   This procedure performs a purge of all NAND and NOR flash memory areas that contain user data.

1. Connect to http://download.spinetix.com/tools/memory-sanitize-ikebana/ from a browser in your PC.
2. Follow the instructions in the READ_ME.TXT file at that location.
3. Access to the necessary utility may require authentication, contact SpinetiX support at support@spinetix.com to get the necessary access.

Restoring factory firmware procedure

In the event that the non-volatile memory sanitization procedure above cannot be carried out for any reason, the following procedure can be used to erase most of the user related data from the non-volatile memories.

WARNING   This procedure does not erase the kernel crash logs from the NOR flash, which may contain some user related information.

WARNING   This procedure makes all user data on the eMMC inaccessible by erasing or rewriting it. It does not, however, guarantee that all eventual copies in the underlying NAND flash have been erased or rewritten as it does not perform a purge operation.

1. Prepare to power up the HMP350, HMP300 or DiVA unit, but leaving the power adapter disconnected from the AC mains.
2. Press the push button of the unit and keep it pressed.
3. Plug the power adapter to the AC mains to power up the unit.
4. Release the push button after 20 seconds or when the SYS LED starts rapidly blinking red; this will start the unit into recovery mode.
5. Wait up to 60 seconds for the recovery mode to finish startup.
6. Connect to the recovery console from your web browser, see the device manual on how to discover the unit's IP address.
7. Once the recovery console is open in your web browser, select the "*Main*" page from the menu at the top of the browser window.
8. If the "*Install factory image*" button is shown, click it, this will re-install the factory firmware.
9. **Otherwise, obtain a firmware package from SpinetiX support, upload it via the "*Browse…*" button and install it by clicking the "*Upload and install this image*" button.**
10. If the process is successful a new firmware has been installed, which erases all user data from the eMMC.

Factory defaults eMMC clearing procedure

In the event that the procedures above cannot be carried out for any reason, the following procedure can be used to clear most of the user related data in the eMMC (NAND flash) by restoring the device to the factory default configuration. In particular configuration, passwords, content and user logs are cleared.

WARNING   This procedure does not erase the kernel crash logs from the NOR flash, which may contain some user related information.

WARNING   This procedure does not clear the system logs from the eMMC, which may contain some user related information.

WARNING   This procedure clears the user content, logs, configuration and passwords so that they are no longer accessible by non-invasive means, but does not physically erase this data from the eMMC.

1. Prepare to power up the HMP350, HMP300 or DiVA unit, but leaving the power adapter disconnected from the AC mains.
2. Press the push button of the unit and keep it pressed.
3. Plug the power adapter to the AC mains to power up the unit.
4. Release the push button after 10 seconds or when the SYS LED starts rapidly blinking green; this will reset the configuration to factory defaults and hence clear the passwords, network configuration and user files from the unit.
5. Let the unit continue its boot procedure until the end, so that the reset to factory defaults is fully effective.
6. The unit has now factory defaults configuration.