Instrument Security Procedures

Model:
123B, 124B, 125B

Product Name:
12xB Industrial ScopeMeter

Instrument Description:
123B – 20 MHz Industrial ScopeMeter

124B – 40 MHz Industrial ScopeMeter

125B – 40 MHz Industrial ScopeMeter

Memory Description:
1. Fluke 12xB has these memory devices: RAM 16 MB x 16 x 8 Banks for measurements and microprocessor data.
2. eMMC flash memory 1 x 32 Gb for embedded software, calibration data, record data, last measurement setting, and screenshots/setups/data.
3. ROM 64 kB and RAM 8 kB. Power controller contains own firmware (ROM) and stack values for computing actions (RAM).
4. Serial Nor Flash 4 MB for FPGA firmware image.

Memory Cleaning Instructions:
- Ad 1. Memory contents 'measuring- and microprocessor data' is erased at power-off. No user access.

- Ad 2. eMMC flash memory: contents stays available at power off and disconnection of battery. Embedded software can be updated by the user: press menu, select USER OPTIONS button, press Firmware Update button. Calibration data can be updated exclusively for manufacturing and service. Record data in eMMC flash can be erased: press RECORD button, press F1 – Recording Setting button, select Internal, press F4 – Done, press F4 – RUN, press F4 – STOP as soon as possible, and "No record data" message is displayed. This means no record data in eMMC flash. Memory contents 'screenshots/setups/data' can be deleted by the user: switch power on, press Menu button, press the F4 - Memory button, press function key F2 – Select All, press F3 – Delete, press F4 - YES. The Delete menu allows erase of memory locations. Last measurement setting can be cleaned by factory default: press MENU, select USER OPTIONS, select Factory Default, press F4 – YES. Factory Default makes instruments return to default state.

- Ad 3. Rom is used to store firmware of power micro-controller. Ram is used when power micro-controller is running. No action for rom and ram. All data will be returned to original state when switching power off.

- Ad 4. Serial Nor Flash contains FPGA image. It's loaded to FPGA automatically when switching power on. The FPGA image update is done automatically when whole instrument image update. No action for serial nor flash.