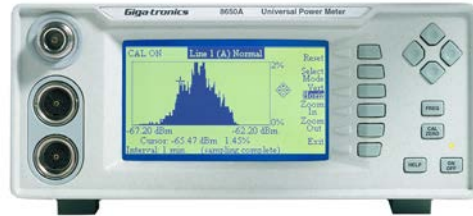


8650A/B Series Universal Power Meter

(model 8651A/B and 8652A/B)

Instrument Security and Memory Sanitization Procedure



The 8650A/B series (model 8651A/B and 8652A/B) is capable of storing 20 instrument states and one state, which stores the power meter's current configuration at the time power is disabled. These instrument states store various parameters pertaining to the power meter configuration and a frequency setting for the frequency correction factor. All power measurement data is stored in volatile RAM (Random Access Memory) and is cleared whenever new measurements are available or when the AC power to the meter is disabled. All other memory such as PROM, and Flash EPROM are used to store the system firmware. This type of memory is not directly accessible but in certain cases, modified by the user. These cases are upgrading of the system firmware and adjusting the calibration factor of the calibrator used to calibrate the power meter. The Clear Memory function in the Service Menu of the 8650A/B clears all volatile data, including frequency correction. The following is a list of the integrated circuit memory used in the 8650A/B:

| | | |
|------------|-----------------|------------------------------------|
| UMD0-08512 | HM62W8512ALFP-8 | SRAM, 512X8 (4Meg Total) |
| UMD0-71256 | IDT71V256SA12Y | RAM, 32X8 (256K Total) |
| UMD1-28800 | TE28F800B3B100 | Flash Memory, 512X18 (8 Meg Total) |
| UMD2-02404 | 24CO4-2.7 | Serial EEPROM, 512X4 (4 Meg Total) |

Memory Clearing Procedure

From the main menu:

1. Press the Meter Setup soft key to display the Setup Menu
2. Press the Service soft key to display the Service Menu
3. Press the Clear Mem soft key to clear the memory

Sensor EEPROM

All 8650A/B Series (model 8651A/B and 8652A/B) compatible sensors include one Xicor EEPROM. The EEPROM stores factory default frequency correction data and should not be deleted. All memory is user accessible via remote operation.

Users may enter frequency and correction information into the special frequency area of the EEPROM. Only one special frequency is reserved for sensor calibration and should not be deleted. Any additional special frequency correction data can be deleted.

| | | |
|-------|--------|------------------------------|
| Xicor | X2444P | 256 bit NVRAM, Sensor Memory |
|-------|--------|------------------------------|



The sensor list includes the following Power Sensors:

| | |
|--------|--|
| 80301A | Power Sensor, +20 to -70 dBm; 10 MHz to 18 GHz |
| 80302A | Power Sensor, +20 to -70 dBm; 10 MHz to 18 GHz |
| 80303A | Power Sensor, +20 to -70 dBm; 10 MHz to 26.5 GHz |
| 80304A | Power Sensor, 0 to -70 dBm; 10 MHz to 40 GHz |
| 81305A | Power Sensor, +20 to -50 dBm; 10 MHz to 50 GHz |
| 80310A | Low VSWR Power Sensor, +26 to -64 dBm; 10 MHz to 18.0 GHz |
| 80313A | Low VSWR Power Sensor, +26 to -64 dBm; 10 MHz to 26.5 GHz |
| 80314A | Low VSWR Power Sensor, +26 to -64 dBm; 10 MHz to 40.0 GHz |
| 80320A | High Power (1 Watt) Sensor, +30 to -60 dBm; 10 MHz to 18 GHz |
| 80323A | High Power (1 Watt) Sensor, +30 to -60 dBm; 10 MHz to 26.5 GHz |
| 80324A | High Power (1 Watt) Sensor, +10 to -60 dBm; 10 MHz to 40 GHz |
| 80321A | High Power (5 Watt) Sensor, +37 to -50 dBm; 10 MHz to 18 GHz |
| 80322A | High Power (25 Watt) Sensor, +44 to -40 dBm; 10 MHz to 18 GHz |
| 80325A | High Power (50 Watt) Sensor, +47 to -40 dBm; 10 MHz to 18 GHz |
| 80330A | True RMS Power Sensor, +20 dBm to -30 dBm; 10 MHz to 18 GHz |
| 80333A | True RMS Power Sensor, +20 dBm to -30 dBm; 10 MHz to 26.5 GHz |
| 80334A | True RMS Power Sensor, +20 dBm to -30 dBm; 10 MHz to 40 GHz |
| <hr/> | |
| 80350A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80351A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80352A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80353A | Modulation Power Sensor, +20 to -60 dBm; 50 MHz to 18 GHz |
| 80354A | Low VSWR Modulation Power Sensor, +26 to -64 dBm; 10 MHz to 18 GHz |
| 80355A | High Power 1 Watt Modulation Sensor, +30 to -57 dBm; 10 MHz to 18 GHz |
| <hr/> | |
| 80401A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80402A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80601A | Modulation Power Sensor, +20 to -67 dBm; 10 MHz to 18 GHz |
| 80701A | Modulation Power Sensor, +20 to -60 dBm; 50 MHz to 18 GHz |
| 80410A | Low VSWR Modulation Power Sensor, +26 to -64 dBm; 10 MHz to 18 GHz |
| 80420A | High Power 1 Watt Modulation Sensor, +30 to -57 dBm; 10 MHz to 18 GHz |
| 80421A | High Power 5 Watt Modulation Sensor, +37 to -47 dBm; 10 MHz to 18 GHz |
| 80621A | High Power 5 Watt Modulation Sensor, +37 to -47 dBm; 10 MHz to 18 GHz |
| 80422A | High Power 25 Watt Modulation Sensor, +44 to -37 dBm; 10 MHz to 18 GHz |
| 80425A | High Power 50 Watt Modulation Sensor, +47 to -34 dBm; 10 MHz to 18 GHz |

Sensor EEPROM Access

Special frequency correction data points can be entered and deleted using the RS-232 or GPIB communications methods. The frequencies are entered directly into the sensor. The format for the command is:

TEST EEPROM A FREQSP #, #, #, # where # represents the value of the frequency in Hertz.

To clear the special frequencies of any user added frequency information, the command
 TEST EEPROM A FREQSP 50e7 is sent followed by the command
 TEST EEPROM A Write 0