

# MAINTENANCE SUPPORT DEVICE – VERSION 3 (MSD-V3) TYPE 1

## FASTER, MORE POWERFUL PERFORMANCE - AS A RUGGED LAPTOP OR TABLET COMPUTER.

Don't let the small size fool you, the new MSD-V3 Type 1 is packed with technology and options that deliver faster, more powerful performance – in a new convertible laptop-to-tablet package. It is still the ultra-rugged HARD WEAR that you've come to expect from the MSD. The MSD-V3 is derived from our family of rugged

laptop computers that have served three generations of the US Army's Integrated Family of Test Equipment (IFTE). It was recently selected for the Army's At-Platform Automatic Test System (APATS) Maintenance Support Device – Version 3 program (MSD-V3). The program's Type 1 requirement drove increased performance in a convertible form factor that's 30% smaller and 50% lighter than previous generations.

### MSD-V3 KIT INCLUDES:

- RCLC-3 Rugged Convertible Laptop Computer (direct connect DC)
- 160 GB Solid State Removable Hard Drive
- Internal DVD+RW/CD Drive
- 10.6" Sunlight Readable Milbrite Display
- European Power Adapter
- NATO Power Cable - optional
- AC Power Cable
- Ethernet Network Cable
- Modem Cable
- Two Li-Ion Batteries

- Software Recovery CD-ROM
- Quick Start Guide
- Hard Carry Case (63 Month Warranty)

### PD TMDE/MSD ORDERING INFORMATION:

MSD-V3 Kit Configuration  
Nomenclature: Test Set, Electronic System  
Type: AN/PSM-95B  
NSN: TBA

MSD-ICE Configuration  
Nomenclature: Test Set, Electronic System  
Type: AN/PSM-95A  
NSN: 6625-01-493-8968

Product Director Test, Measurement, and Diagnostic Equipment (PDTMDE) supports the soldier by developing, acquiring, and sustaining rugged, compact, lightweight man-portable general purpose automatic test equipment to improve the readiness and to reduce operating and support costs of Army Legacy, Interim and Objective Force weapon systems.

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# MAINTENANCE SUPPORT DEVICE – VERSION 3 (MSD-V3) TYPE 1



**PROCESSOR:** Intel® Core™ 2 Duo P8400 mobile processor includes a 2.26 GHz processor, 3 MB L2 cache, 1066 MHz Front Side Bus

**OPERATING SYSTEM:** Windows® Vista Tablet PC support (XP downgrade available IAW Microsoft® licensing provisions), Red Hat Enterprise Linux (RHEL 5.3)

**RAM:** Up to 8 GB Double-Data-Rate 3

**GRAPHICS:** Integrated Mobile Intel® Graphics Media Accelerator 4500MHD with 352 MB VRAM Allocation DVM 5.0

**STORAGE:** 160 GB Removable Solid State Drive SATA (3 Gigabit/second); 16-256 GB optional

**DISPLAY SYSTEM:** 10.6" WXGA (1280x768), LCD LED backlit, Sunlight Readable Touchscreen up to 100,000 lux

**KEYBOARD/POINTING DEVICE:** Rugged 87 key, backlit keyboard with tactile feel, tethered stylus and mouse "stick"

**INTERFACES:** One RS-232/422/485-2/4 wire SW configurable, one USB 2.0, two combo USB 2.0/eSATA 3 Gbps, Analog (SVGA), one 10/100/1000 Ethernet, audio (In/Out/Mic ports), PCMCIA - 2x Type II or 1x Type III, Express Card/54, Smart Card, optional 802.11 a/b/g/n wireless, optional embedded dual 1553 or embedded second RS-232/422/485; Upgradeable EFI BIOS

**PERIPHERALS:** DVD+RW/CD-RW; optional Blu-ray via Docking Station

**PHYSICAL:** Dimensions 11"W x 8.5"D x 2.4"H; Weight ~7.9 lbs.

**POWER:** Rugged AC adapter/charger and AC power cord enables operation from 85 to 132 VAC, 47 to 440 Hz or 85 to 264 VAC, 47-63 Hz input power, Single DR202 Form Factor Li-ion 7800 mAh rechargeable battery; optional Rugged Docking Station with embedded power adapter

**DOCKING STATION (OPTIONAL):** Enables operation from 85 to 132 VAC, 47 to 440 Hz or 85 to 264 VAC, 47-63 Hz input power; DVD+RW/CD-RW, IEEE 1284 parallel port; additional USB 2.0 port, RS-232/422/485, battery bay, and modem port

## ENVIRONMENTALS

**TEMPERATURE, OPERATING:** MIL-STD-810G, Methods 501.5 and 502.5, Procedure II, (-18°C to +60°C), (0°F to +140°F)

**TEMPERATURE, NON-OPERATING:** MIL-STD-810G, Methods 501.5 and 502.5, Procedure I (-32°C to +71°C), (-25°F to +160°)

**SOLAR RADIATION:** MIL-STD-810G, Method 505.5, Procedure I, Diurnal Cycle A1

**SHOCK, TRANSIT DROP:** MIL-STD-810G, Method 516.6, Procedure IV, Table IV to a maximum height of 36 inches

**SHOCK, FUNCTIONAL:** MIL-STD-810G, Method 516.6, Procedure I

**TRANSPORTATION VIBRATION (COMPOSITE-WHEELED VEHICLES):** MIL-STD-810G, Method 514.6, Procedure I, Category 4, Annex C

## TRANSPORTATION VIBRATION (WATERCRAFT):

MIL-STD-810G, Method 514.6, Procedure I, Category 21, Annex D

**ALTITUDE:** MIL-STD-810G, Method 500.5, Procedure I (Storage) to 30,000 feet, Procedure II (Operational) to 12,500 feet

**RAIN:** MIL-STD-810G, Method 506.5, Procedure I, 1.8" per hour, wind velocity 20 mph for 30 minutes per side

**HUMIDITY, OPERATING:** MIL-STD-810G, Method 507.5, Procedure II, Aggravated (per Figure 507.5-7) up to 95% Relative Humidity

**HUMIDITY, NON-OPERATING:** MIL-STD-810G, Method 507.5, Procedure II, Aggravated (per Figure 507.5-7) up to 95% Relative Humidity

**SALT FOG:** MIL-STD-810G, Method 509.5, 5 ± 1% aqueous salt atmosphere while in transit case and core operating shipboard

**SAND/DUST:** MIL-STD-810G, Method 510.5, Procedures I and II

**SAND:** Winds of 20 mph ± 3 mph per side, concentration 2.2 ± 0.5 g/m<sup>3</sup>

**DUST:** Winds of 20 mph ± 3 mph per side, concentration 10.6 ± 0.7 g/m<sup>3</sup>

**FUNGUS:** MIL-STD-810G, Method 508.6

**EXPLOSIVE ATMOSPHERE:** MIL-STD-810G, Method 511.5, Procedure 1

## EMI / EMC

**RADIATED EMISSIONS:** MIL-STD-461F, RE101 Paragraph 5.16 Army curve, RE101 Paragraph 5.16 Navy curve, RE102 Paragraph 5.17 Army Helo curve, RE102 Paragraph 5.17 Navy surface ship (topside) curve

**RADIATED SUSCEPTIBILITY:** MIL-STD-461F, RS103 Paragraph 5.20 Ground Limit (30 MHz to 18 GHz), RS103 Paragraph 5.20 Table VII All Ships (Above Deck) 200 V/m, RS105 Paragraph 5.21

**CONDUCTED EMISSIONS:** MIL-STD-461F, CE101 Paragraph 5.4, CE102 Paragraph 5.5

**CONDUCTED SUSCEPTIBILITY:** MIL-STD-461F, CS101 Paragraph 5.7, CS114 Paragraph 5.13 Table VI Ground Army and Shipboard All Ships Column, CS115 Paragraph 5.14, CS116 Paragraph 5.15

**HIGH ALTITUDE ELECTROMAGNETIC PULSE (HEMP):** MIL-STD-461F, RS105 Paragraph 5.21

**ELECTROMAGNETIC ENVIRONMENT:** MIL-STD-464A, Paragraph 5.3, Table 1A

**ELECTROMAGNETIC RADIATION HAZARDS:** MIL-STD-464A, frequency range of 2 MHz to 18 GHz



**VT Miltope**

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