



BOWMAN BMDT-3 NOTEBOOK COMPUTER

In production for the UK BOWMAN BCIP5.4 Program, the BOWMAN BMDT-3 notebook computer is designed and manufactured to survive the most rugged conditions worldwide, making it ready and able to perform during the most demanding operational challenges.

The BOWMAN BMDT-3 is the right choice for military operations in any hostile environment due to a wider operational temperature range, a fully-sealed stronger construction and proven military heritage wherever it is needed – on the digital battlefield or the flightline.

The BOWMAN BMDT-3 houses an entirely commercial-off-the-shelf (COTS) internal architecture and features long-life rechargeable Lithium Ion batteries that are hot-swappable, a truly exceptional thin film transistor (TFT) daylight readable display and a removable hard-drive.

The BOWMAN BMDT-3 has been specifically designed for extremely harsh environments and meets critical EMI and MIL-STD-810 environmental requirements. This proven and reliable computing system brings exceptional rugged computing performance and flexibility to the field at an affordable price and low life-cycle cost.

KEY FEATURES

- Intel® Core i7 CPU
- Rugged lightweight design
- MS Windows, Linux, 16GB ram
- Dual hot-swappable batteries (ACPI compliant)
- Integrated power management
- High-resolution sunlight readable TFT display touchscreen
- Configurable I/O options
- Secure B105, TPM v1.2 bay
- Removable hard drive - SSHD option
- Dual RS170 video interfaces
- Vehicle installation Kit

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TECHNICAL SPECIFICATION

GENERAL	
Processor	2.8 GHz Intel® Core i7 Dual Core (quad thread)
Memory	2 x 8 GB DDR3/ECC (16 GB total)
Mass storage	Removable internal 320 GB SATA hard drives or 512 GB SSHD's
Resolution	1024 x 768 pixels
Operating system	MS Windows, Linux
Expansion	Optional DVD/CD-ROM drive
External ports	Parallel port, two (2) USB 2.0 ports, Dual ethernet port, external video supports up to QXGA 2048 x 1536, Can Bus, 2 x RS170 ports
Graphics Processing Unit	Integrated ATI Radeon high performance Graphics Processing Unit (GPU) with 128 MB GDDR3 Memory
Communication ports	port 1: RS-232, port 2: RS-422 or RS-423, port 3: RS-422 or RS-423 or isolated RS-422
Power	28 VDC vehicle power per MIL-STD-1275A, AC converter 90-264 VAC, 47-440 Hz
Battery	x2 ACPI compliant smart battery packs
Weight	6.8Kg
Dimensions (H x W x D)	330mm x 304mm x 63.5mm (excluding connectors)
Security	Secure BIOS: TPM v1.2: Enhances Embedded Security Architecture (DEESA)



ENVIRONMENT	
Temperature (operating)	-20°C to 60°C -32°C to 60°C with heaters
Temperature (non-operating)	-40°C to 71°C
Temperature (shock)	-35°C to 21°C and 21°C to 52°C each within 10 minute intervals
Salt fog	48-hour exposure per MIL-STD-810E, Method 509.3, Proc. I
Solar radiation	Exposure per MIL-STD-810E, Method 505.3, Proc. I, hot-dry
Shock (road)	Operates during three half-sine shock impulses in each direction of each orthogonal axis (total of 18 shocks) at a peak amplitude of 30g (-0%, 20%) and duration of 11ms (-0%, +50%), on isolation mounts
Shock (functional)	Operates during three half-sine shock impulses in each direction of each orthogonal axis (total of 18 shocks) at a peak amplitude of 40g (-0%, 20%) and a duration of 6ms (-0%, +50%), hard mounted
Altitude	10,000 feet operating (tested to 15,000 feet) per MIL-STD-810E, Method 500.3, Proc. II
Humidity	Relative humidity operating per MIL-STD-810E, Method 507.3, Proc. II
Sand and dust	Exposure to wind blown sand and dust particles at a rate of 20±3 miles, per hour for 30 minutes per MIL-STD-810E, Method 510.E, Proc. I
Water tightness	No water penetration, 50 psig, 40 minutes, 3 feet spray per MIL-STD-810E, Method 506.3, Proc. III
Climate	Fungus resistant
Explosive atmosphere	Non-explosive when tested per MIL-STD-810E, Method 511.3, Proc. I
Vibration	Operates on the move without degraded performance when mounted on shock isolation fixtures for tracked and wheeled vehicles per MIL-STD-810E, Method 514.4, Proc. I, Category 8
EMI	MIL-STD-461E, CE-102, CS-101, CS-114, RE-102 and RS-103
ESD (operating)	15,000V to controls/surfaces
ESD (non-operating)	2000V to I/O pins