



RUGGED CONVERTIBLE LAPTOP

IP54 / MIL-STD-810F / MIL-STD-461E

A proven, fully ruggedized, convertible laptop without the fully ruggedised price tag!...

Meeting the requirements of MIL-STD-810F for drop, vibration and temperature, as well as MIL-STD-461E for EMC requirements, the ndura RUGGED® Convertible Laptop provides reliable computing anywhere, anytime.

Offering an array of wireless capabilities, this rugged convertible laptop can provide continuous communication. Built for rugged mobility, the ndura RUGGED® Convertible Laptop offers intuitive design for easy operation and weighs in at 4.1Kg.

The ndura RUGGED® Convertible Laptop is powered by an Intel® Core™ 2 Duo ULV U7500 1.066GHz processor, with 2GB RAM as standard (upgradeable to 4GB) providing speed and performance in demanding applications. The 13.3" TFT provides a high resolution, convertible display, ensuring clear, sharp images with optional high brightness and sunlight readability.



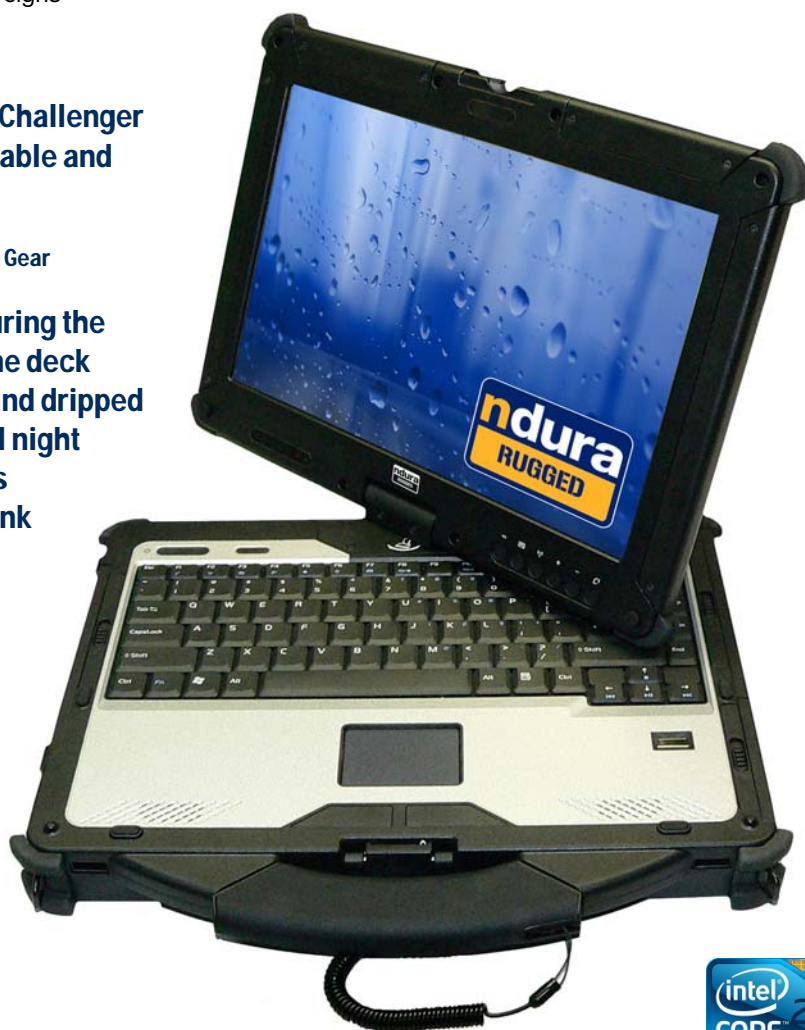
"The ndura RUGGED® Laptop is the Challenger Tank of the laptop world, solid reliable and definitely tough".

Gary Humphrey 2009, Safety Advisor, BBC Top Gear



"...the laptop was put to the test during the earlier days of the voyage when the deck opened up above the chart table and dripped salt water on the rugged laptop all night to no effect....the NDURA laptop has somehow found its way into the sink and is submerged but fine."

Pete Goss MBE, Ex Royal Marine



FEATURES INCLUDE:

- MIL-STD-810F
- MIL-STD-461E
- Rugged Design
- Eclipt Drive Compatible
- Convertible Rugged Touch Screen
- Sunlight Readability
- Integrated DVD/CD RW Drive
- Backlit Keyboard
- Fanless Design
- Rich I/O Port Array





TECHNICAL SPECIFICATIONS

Processor	Intel® Core™ 2 Duo ULV U7500 1.066GHz Merom-2m (65nm) 2MB L2 Cache, TDP 10W
BIOS	Phoenix Trust Code Base
CHIPSET	Intel® GM965, TDP 13.8W Southbridge ICH8M (Chipset)
Main Memory	2GB DDR II 667 MHz X 1 (up to 4GB)
Display	13.3" wide Active Matrix TFT WXGA 1280 x 800, Convertible Display Resistive Touch Panel Support, Rebounding Sunlight Readable Display 600 Nits (cd/m2)
Graphics	Intel® GM965 Integrated Graphics
CRT Display	Up to QXGA 2048 x 1536
Storage	2.5" SATA HDD 250Gb, 5400RPM With Heater & Pass 810F Cold Start Test Shock-mounted Removable HDD
Card Slot	PCMCIA 2.1 supports Type I/II (PC Card) SD Card Reader
Connectivity	WLAN : 802.11ABGN (a/b/g/Draft-N 2.0) GOLAN WLAN INTEL/WM3945AGM2GEN (Mini PCI-e) LAN : 10/100/1000 PAN : Bluetooth 2.1 Class II GPS Receiver Support Modem 56kbps (V.92) Military Connectors (OPTIONAL)
Optical Device	Integrated CD-RW / DVD-RW Dual Layer Drive
LED Status Indicator	Power on/Suspend Battery Full / Charging / Low HDD Access WLAN Connectivity Bluetooth Connectivity Caps Lock
Interface	1 x LAN RJ45 1 x VGA / D-sub 15-pin for external monitor 3 x USB 2.0 A ports 1 x Audio Jack : Ear Phone Out 1 x Audio Jack : MIC-in 1 x DC-in 1 x SIM Card 1 x Array Microphone 1 x PC Card Slot 1 x SD Card Reader 1 x Docking Connector (PoGo Pin) 1 x RS-232 1 x RJ11

Audio	HD Audio Built-in speaker x 2 (Total MAX:4W) Microphone x 2 (array microphone)
Keyboard	87 keys for UK / EU LED Backlit keyboard Compliant IP-65
Power Management	ACPI 3.0 Supported
Battery Life	Li-Ion 9 cells, 7800 mAh up to 6 Hours, Built-in gauge IC Charging Time : 2.5 hrs to 80%
AC Adaptor	Output: 19V DC, 4.74A, 90W Input: 100-240V AC, 50/60Hz universal 3 pin compact power supply system MIL-STD 461E Ground Army
Pointing Device	Built-in Resistive Touch Screen with Stylus
Heat Dissipation	Fan-less design Total thermal envelope
Dimensions / Weight	344mm x 298mm x 58mm Weight < 4.1KG
Security	TPM 1.2 (Trusted Platform Module Security Chip), Fingerprint Recognition BIOS setup, Power-on, HDD User Password Protection Kensington Lock
Hot Key	SAS Key Screen Rotation Key Virtual keyboard RF Switch Brightness up/down
Regulation	EMI: FCC, CE, MIL-STD-461E Ground Army Safety: CB, cUL, UL Modem: Universal PPT including US(FCC-B), TWN(DGT), PRC (FCC68), JPN(JATE), EURO(CTR21)
Operating System	<ul style="list-style-type: none"> Windows Vista Business Windows XP for Embedded Systems
Windows Certification	Compatibility: HCT V12.0 / DTM (Vista) Supported OS: Windows XP Tablet PC Edition / Windows Vista Business 32 bit.

ENVIRONMENTAL TESTING

IP Rating	IP54 MIL-STD-810F
Enclosure	Water Resistance According to MIL-STD-810F 506.4, Procedure II, IEC 60529 Edition 2.1 : 2001-02-IPX4 (International Electro Technical Commission Publication) Dust Resistance According to MIL-STD-810F 510.4, Procedure I, IEC 60529 Edition 2.1 : 2001-02-IP5X (International Electro Technical Commission Publication)
Drop	According to MIL-STD-810F 516.5 Procedure VI, 26 times from 122cm height free drop onto 5cm Fir Board backed by concrete
Temperature	High Temperature - According to MIL-STD-810F 501.4, Procedures I (Storage) and II (Operation) Low Temperature - According to MIL-STD-810F 502.4, Procedures I (Storage) and II, III (Operation) Operating : -20°C to +50°C Boot Operating : -20°C to +50°C (with HDD Heater) Non Operating : -20°C to +50°C
Vibration	Random Vibration (Non Operating) According to MIL-STD-810F Method 514.5, Procedure I Category 24, Fig.514.5C-17 Sine Vibration (Non Operating) According to MIL-STD-810F Method 514.5, Procedure I Category 24, Fig.514.5C-18
Humidity	According to MIL-STD-810F 507.4 Procedure I (Storage) Procedure II (Operation)
Altitude	According to MIL-STD-810F 500.4 Procedure I (Storage) Procedure II (Operation)
EMC	According to MIL-STD-461E TEMPEST Option
Accessories / Options	Spare Battery UK Power Cable as standard

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Technical Specifications quoted are qualified and verified but do not indicate the maximum performance limitations of the equipment. Specifications are subject to change without notice. E & OE Issue A

