

**TOUGHBOOK®**

# toughbook 51

## Full-featured Desktop Alternative

- *Large 15" Display for Group Presentations*
- *Full Magnesium Alloy Case*
- *Shock-mounted, Removable Hard Drive*
- *TPM and Optional SmartCard for Added Security*
- *Intel® Centrino® Duo Mobile Technology*



toughbook

51

**Panasonic**  
ideas for life

### Panasonic recommends Windows Vista™ Business.

#### SOFTWARE

- Genuine Windows® XP Professional SP2
- Setup, Online Reference Manual, Adobe® Reader

#### CPU

- Intel® Core™ Duo Processor T2500
  - 2MB L2 cache
  - Processor speed 2.0GHz
  - 667MHz FSB
- Intel® Core™ Duo Processor T2300
  - 2MB L2 cache
  - Processor speed 1.66GHz
  - 667MHz FSB

#### STORAGE & MEMORY

- Intel® Core™ Duo Processor T2500
  - 512MB SDRAM (DDR2) standard, expandable to 4GB\*;
  - or 1GB SDRAM (DDR2) standard, expandable to 4GB\*
  - 80GB hard drive (shock-mounted & easily removable)
- Intel® Core™ Duo Processor T2300
  - 512MB SDRAM (DDR2) standard, expandable to 4GB\*
  - 60GB hard drive (shock-mounted & easily removable)

#### DISPLAY

- Intel® Core™ Duo Processor T2500
  - 15" 1600 x 1200 (UXGA) TFT active matrix color LCD
  - ATI Mobility Radeon® x1300, 128MB or 256MB VRAM
- Intel® Core™ Duo Processor T2300
  - 15" 1024 x 768 (XGA) TFT active matrix color LCD
  - Intel® GMA 950 graphic controller, UMA (Unified Memory Access) up to 128MB

#### AUDIO

- Intel® high-definition audio compliant
- SigmaTel™ STAC9200
- Integrated stereo speakers
- Convenient keyboard volume and mute controls

#### EXPANSION SLOTS

- PC card type II x 2 or type III x 1
- Secure Digital (SD) card x1

#### MULTIMEDIA POCKET

- 1.44MB FDD standard
- Combo Drive (DVD-ROM/CD-R/RW) or DVD Multi Drive (DVD-RAM/DVD-ROM/DVD-RW/CD-R/CD-ROM/CD-RW) standard
- Will accept optional second battery

#### KEYBOARD & INPUT

- 87-key with dedicated Windows® key
- Electrostatic touchpad with scrolling support

#### WIRELESS LAN

- Intel® PRO/Wireless 3945ABG network connection 802.11a/b/g
- Security
  - Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
  - Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES

#### INTERFACE

- External keyboard/mouse Mini-DIN 6-pin
- External video D-sub 15-pin
- Headphones/speaker Mini-jack Stereo
- IEEE 1394 (Firewire) 4-pin
- Microphone/line In Mini-jack Stereo
- Port replicator Dedicated 100-pin
- Serial D-sub 9-pin (UART 16550 compatible)
- USB 2.0 (x4) 4-pin
- 10/100/1000 Ethernet RJ-45
- 56Kbps Modem RJ-11

#### POWER SUPPLY

- Lithium ion battery pack (11.1V, 7650mAh)
- Battery operation: 6 hours\*\*
- Battery charging time: approximately 4.5 hours\*\*
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply
- Pop-up on-screen battery status reporting

#### POWER MANAGEMENT

- Suspend/Resume Function, Hibernation, Standby, ACPI BIOS

#### SECURITY FEATURES

- Password Security: Supervisor, User, Hard-Disk Lock
- Cable lock slot
- Trusted platform module (TPM) security chip v.1.2

#### WARRANTY

- 3-year limited warranty, parts and labor

#### DIMENSIONS & WEIGHT

- 1.9" (H) x 12.8" (W) x 10.9" (D)
- 6.8 lbs.



- Large 15" Display for Group Presentations
- Full Magnesium Alloy Case
- Shock-mounted, Removable Hard Drive
- TPM and Optional SmartCard for Added Security
- Intel® Centrino® Duo Mobile Technology

#### INTEGRATED OPTIONS\*\*\*

- SmartCard reader
- Bluetooth® v.2.0
- Fingerprint scanner
- DVD Multi Drive (DVD-RAM/DVD-RW/CD-R/RW)

#### ACCESSORIES

- AC Adapter (3-pin) CF-AA1683AM
- Battery Charger CF-VCBTB1U
- ComFolio Universal Carrying Case (large capacity) COMUNIV-P
- ComFolio Universal Jr. Carrying Case COMUNIVJR-P
- Desktop Port Replicator CF-VEB512W
- Lithium Ion Battery Pack CF-VZSU29AU
- Lithium Ion Battery Pack for Multimedia Pocket CF-VZSU1473U
- Memory Cards
  - 512MB CF-WMBA5512
  - 1GB CF-WMBA501G
- Mobile Data Wireless Display CF-VDW07CHM
- ToughMate CF51 Always-on Case FM51-P
- Large Venue DLP Projector PT-DW5000U
- Mobile LCD Projector PT-LB50U

\*Total useable memory will be less depending upon actual system configuration.

\*\*Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from BatteryMark v.4.0.1, minimum brightness.

\*\*\*Integrated Options may vary depending on your notebook configuration. Please consult your reseller or Panasonic representative before purchasing.

For more information call **1.800.662.3537** or visit us on the Web at [panasonic.com/toughbook](http://panasonic.com/toughbook).

Panasonic is constantly enhancing product specifications and accessories. To find the most up-to-date information on the Toughbook 51, please visit our website. Specifications subject to change without notice. Trademarks are property of their respective owners. ©2007 Panasonic Corporation of North America. All rights reserved.



**Panasonic**  
ideas for life