

# THE TOUGHBOOK 19

**Rugged, lightweight, wireless and convertible.**

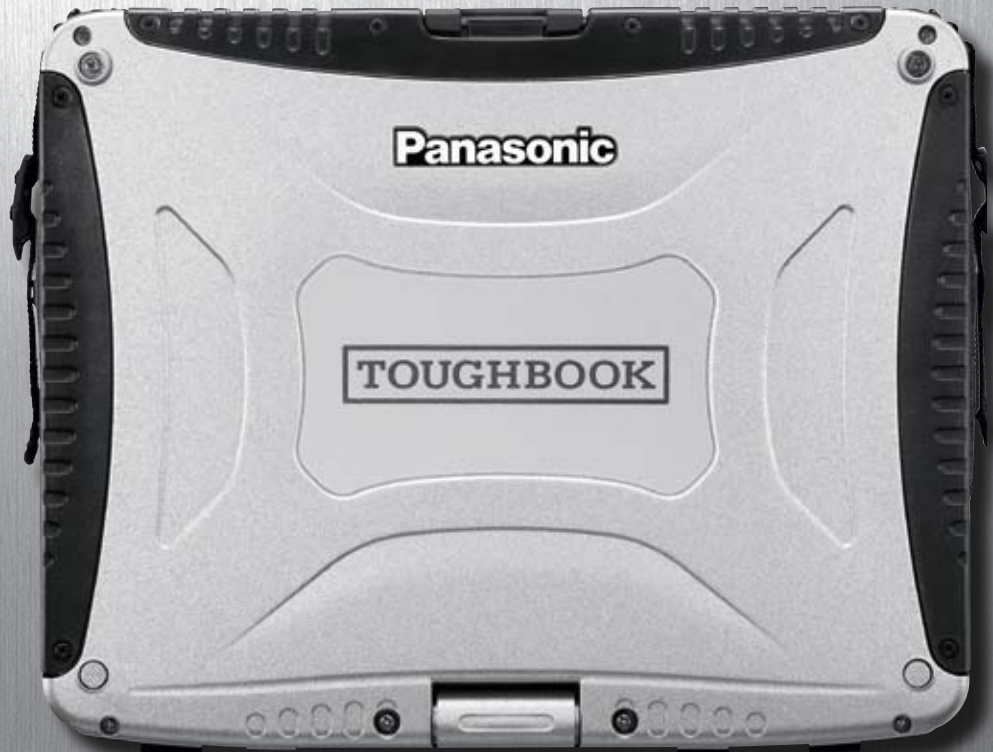
In your world, performance is everything. If you want a fully-rugged, lightweight, wireless laptop that converts from a powerful notebook PC to a convenient tablet PC with one quick swivel, then the Toughbook® 19 is for you. The first tablet PC to be certified¹ for MIL-STD-810G and IP65, it features a full magnesium alloy case capable of withstanding a 6-foot drop¹ — ideal for working in those challenging environments and mission-critical situations. At only five pounds, it's good on the go with a hand strap, Wi-Fi, a sunlight-viewable display with Panasonic CircuLumin™ technology and optional embedded Gobi™ mobile broadband.

**IP65**

**6-FOOT  
DROP RATING**

**MIL-STD-  
810G**

*The first MIL-STD-810G  
certified tablet PC¹*



**TOUGHBOOK®**



# THE PANASONIC TOUGHBOOK 19.

## DURABILITY FEATURES

- MIL-STD-810G certified (6' drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere)<sup>1</sup>
- MIL-STD-461F certified<sup>1</sup>
- IP65 certified sealed all-weather design<sup>1</sup>
- UL1604 class I division 2, groups ABCD certified model
- CCX Certified v4
- HDD heater
- Full magnesium alloy case with hand strap
- Shock-mounted flex-connect hard drive with quick-release
- Pre-installed replaceable screen film for LCD protection

## SOFTWARE

- Genuine Windows® 7 Professional (with XP downgrade option)
- Setup, Diagnostics, PC Information Viewer, Online Reference Manual, Adobe® Reader, Panasonic Handwriting (with signature capture on Tablet PC), Zoom Utility, Concealed Mode Utility, Software Keyboard, Display Rotation Tool, Hard Disk Data Erase Utility, Recovery DVD

## CPU

- Intel® Core™ i5-540UM vPro™ Processor
  - 1.2GHz with Turbo Boost up to 2.0GHz
  - Intel Smart Cache 3MB

## STORAGE & MEMORY

- 2GB SDRAM (DDR3-1066MHz) standard, expandable to 8GB<sup>2,3</sup>
- 160GB HDD (shock-mounted flex-connect with quick-release)<sup>3</sup>
  - Optional 128GB reinforced flex-connect solid state drive (SSD)

## DISPLAY

- 10.4" 1024 x 768 XGA sunlight-viewable touchscreen or optional dual touch LCD
  - Panasonic CircuLumin™ technology: 2-1000 nit, AR, AG, circular polarizer
- External video support up to 1280 x 1024 at 16.7 million colors
- Intel® QM57 (GMA 4500MHD video controller) max. 1024MB UMA VRAM on XP<sup>2</sup>
- Concealed mode
- LED Backlighting

## AUDIO

- Intel® high-definition audio compliant
- Integrated speaker
- Convenient keyboard volume and mute controls

## KEYBOARD & INPUT

- Touchscreen or dual touch (touchscreen and digitizer models)
- Integrated stylus holder
- 82-key with dedicated Windows® key
- Pressure-sensitive touchpad with vertical scrolling support

## EXPANSION SLOTS

- PC card type II x 1
- SD card (SDHC)
- ExpressCard/54 x 1

## INTERFACE

- |                            |                   |
|----------------------------|-------------------|
| • Port replicator          | Dedicated 100-pin |
| • VGA                      | D-sub 15-pin      |
| • Headphones/speaker       | Mini-jack stereo  |
| • Microphone/line in       | Mini-jack stereo  |
| • Serial                   | D-sub 9-pin       |
| • Ext. antenna conn. (x 2) | 50 ohm coaxial    |
| • USB 2.0 (x 2)            | 4-pin             |
| • IEEE 1394a (FireWire)    | 4-pin             |
| • 10/100/1000 Ethernet     | RJ-45             |
| • 56K modem                | RJ-11             |

## WIRELESS

- Optional integrated Gobi™2000 mobile broadband
- Intel® Centrino® Advanced-N 6200 802.11a/b/g/n
- Bluetooth® v2.1 + EDR (Class 1)
- Security
  - Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
  - Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES
- Dual high-gain antenna pass-through
- Slide on/off switch

## POWER SUPPLY

- Lithium ion battery pack (11.1V, typical 5600mAh, minimum 5300mAh)
- Battery operation: 9 hours (touchscreen), 8.5 hours (dual touch)<sup>4</sup>
- Battery charging time: 3.5 hours<sup>4</sup>
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

## POWER MANAGEMENT

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

## SECURITY FEATURES

- Password Security: Supervisor, User, Hard Disk Lock
- Kensington cable lock slot
- Trusted platform module (TPM) security chip v.1.2
- Computrace® theft protection agent in BIOS<sup>5</sup>
- Optional fingerprint reader
- Optional SmartCard reader

## WARRANTY

- 3-year limited warranty, parts and labor

## DIMENSIONS & WEIGHT

- 8.5"(L) x 10.7"(W) x 1.9"(H)
- 5.1 lbs.

## INTEGRATED OPTIONS<sup>6</sup>

- Gobi™2000 mobile broadband (EV-DO Rev. A, HSPA)
- 2.0MP camera with auto focus and dual LED light<sup>7</sup>
- GPS receiver
- Backlit keyboard
  - Sealed rubber or plastic emissive
- SmartCard reader
- Fingerprint reader
- HDD and battery lock



- Convertible Notebook to Tablet Design
- The First MIL-STD-810G Certified Tablet PC<sup>1</sup>
- 6-foot Drop and IP65 Certified<sup>1</sup>
- Sunlight-viewable Display with Panasonic CircuLumin™ Technology
- Full Magnesium Alloy Case with Hand Strap
- Shock-mounted Flex-connect Hard Drive with Quick-release
- Mobile Broadband and GPS-ready Design

## ACCESSORIES<sup>6</sup>

- |  |                            |
|--|----------------------------|
| • AC Adapter (3-pin)   | CF-AA1633AM                |
| • Battery Charger  | CF-VCBTB1W                 |
| • Lithium Ion Battery Pack   | CF-VZSU48U                 |
| • LIND Car Adapter 120W  | CF-LNDDC120                |
| • Dual Touch Replacement Stylus (for Digitizer)  | CF-VNP012U                 |
| • Touchscreen Replacement Stylus   | CF-VNP003U                 |
| • InfoCase ComUniversal Jr. Carrying Case  | COMUNIVJR-P                |
| • InfoCase Backpack  | TM-UNIVBPK-P               |
| • InfoCase Always-on 19 Case   | FM19-P                     |
| • InfoCase 19 "X" Hand Strap   | FM19X-P                    |
| • External USB Combo Drive (DVD-ROM/CD-RW)   | CF-VDRRT3U                 |
| • Memory Cards <ul style="list-style-type: none"> <li>– 2GB DDR3</li> <li>– 4GB DDR3</li> </ul>                            | CF-WMBA902G<br>CF-WMBA904G |
| • Desktop Port Replicator  | CF-VEB181AU                |
| • Vehicle Port Replicator <ul style="list-style-type: none"> <li>– no pass-through</li> <li>– dual pass-through</li> </ul> | CF-WEB194A<br>CF-WEB194AC  |
| • 10.4" LCD Protector Film for Touchscreen & Dual Touch  | CF-VPF11U                  |

Please consult your reseller or Panasonic representative before purchasing.

<sup>1</sup>Tested by national independent third-party lab following MIL-STD-810G Method 516.6 Procedure IV for transit drop test and IEC 60529 Sections 13.4, 13.6.2, 14.2.5 and 14.3 for IP65.

<sup>2</sup>Total usable memory will be less depending upon actual system configuration. Maximum of 2048MB of memory when equipped with camera. Windows 7 max. VRAM is 763MB with 2GB of memory, or 1435MB with 4GB of memory.

<sup>3</sup>1GB = 1,000,000,000 bytes

<sup>4</sup>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 MobileMark 2007.

<sup>5</sup>Requires software and activation to enable theft protection.

<sup>6</sup>Accessories and Integrated Options may vary depending on your notebook configuration.

<sup>7</sup>Camera replaces the second memory slot located on the bottom of the PC.

877-870-3806 / [www.mruggedmobile.com](http://www.mruggedmobile.com) / [sales@mruggedmobile.com](mailto:sales@mruggedmobile.com)

Financing options now available from Panasonic Finance Solutions; please call number above for more details.

Panasonic is constantly enhancing product specifications and accessories. Specifications subject to change without notice. Trademarks are property of their respective owners. ©2010 Panasonic Corporation of North America. All rights reserved.

**Panasonic ideas for life**

ss19mk4 05/10

