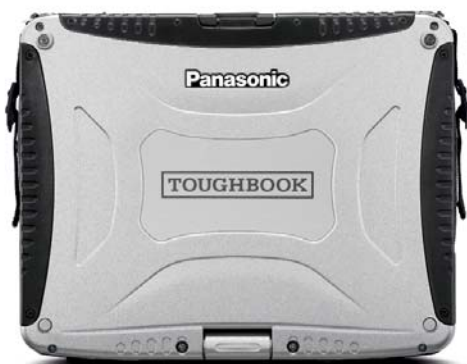# Panasonic

Panasonic recommends Windows 8 Pro.

TOUGHBOOK 19

- Convertible Notebook to Tablet Design

- Sunlight-viewable Up to 6500 Nit in Direct Sunlight

- Full Magnesium Alloy Case with Hand Strap

- Shock-mounted Flex-connect Hard Drive with Quick-release

- Optional integrated LTE Mobile Broadband

Rugged, lightweight, wireless and convertible.

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 certified[1] for MIL-STD-810G and IP65, it features a full magnesium alloy case capable of withstanding a 6-foot drop[1]—ideal for working in challenging environments and mission-critical situations. At only five pounds, it's good on the go with a hand strap, Wi-Fi, a brilliant LED screen capable of up to 6500 nit in direct sunlight, and optional integrated LTE mobile broadband.

IP65

6-FOOT DROP RATING

MIL-STD-810G

The first MIL-STD-810G certified tablet PC[1]

MRUGGED Mobile Technology

Panasonic recommends Windows 8 Pro.

intel inside
CORE i5 vPro

DURABILITY
- MIL-STD-810G certified (6' drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere)[1]
- IP65 certified sealed all-weather design[1]
- UL1604 class I division 2, groups ABCD certified model
- Hard drive 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
- Windows 8 Pro
- Windows 7 Professional 32-bit[1] or Windows 7 Professional 64-bit[1]
- Panasonic Utilities, Recovery Partition

CPU[3]
- Intel® Core™ i5-3340M vPro™ Processor
  – 2.7GHz with Turbo Boost up to 3.4GHz
  – Intel® Smart Cache 3MB

STORAGE & MEMORY
- 4GB SDRAM (DDR3L-1333MHz) standard, expandable to 8GB[4,5]
- 500GB 7200rpm hard drive (shock-mounted flex-connect with quick-release)[5]
  – Optional 128GB and 256GB reinforced flex-connect solid state drives (SSD)[5]

DISPLAY
- 10.1" XGA sunlight-viewable LED 1024 x 768 (touchscreen or optional dual touch)
  – TransflectivePlus and Panasonic CircuLumin™ technology
  – 1-6500 nit (depending on lighting conditions and settings)[6]
  – AR, AG and circular polarizer
- Intel® QM77 video controller, max. 1544MB shared VRAM with 32-bit[4]
- External video support up to 1280 x 1024 at 16.7 million colors
- Concealed mode

AUDIO
- Intel® high-definition audio compliant
- Integrated speaker
- 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 (SDXC)
- ExpressCard/54 x 1

INTERFACE

Docking connector	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 1)	4-pin
USB 3.0 (x 1)	4-pin
IEEE 1394a (FireWire)	4-pin
10/100/1000 Ethernet	RJ-45
56K Modem	RJ-11

WIRELESS
- Optional integrated LTE mobile broadband
- Intel® Centrino® Advanced-N 6235 802.11a/b/g/n
- Bluetooth® v4.0 + 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 5700mAh, minimum 5400mAh)
- Battery operation: 10 hours (touchscreen), 9.5 hours (dual touch)[7]
- Battery charging time: 3.5 hours[7]
- 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[8]
- Intel® Anti-Theft Technology
- Optional fingerprint 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[9]
- LTE mobile broadband
- GPS receiver
- Backlit keyboard
- Fingerprint reader
- HDD and battery lock

SELECT ACCESSORIES[9]

AC Adapter (3-prong)	CF-AA6503A2M
Lithium Ion Battery Pack[11]	CF-VZSU48U
Battery Charger	CF-VCBTB2W
LIND Car Adapter	PA15801745
Carrying Case	CL55
Harness	CFMUHP
Hand Strap	CF19XS
Memory Cards	
– 4GB DDR3L	WMBA1104G
Desktop Dock	CF-VEB191AU
PDRC Backlit Keyboard	CF-VKBL03AM
Dual Touch Replacement Stylus (for Digitizer)	CF-VNP012U
Touchscreen Replacement Stylus	CF-VNP003U
Tether	CF-VNT002U
LCD Protector Film for Touchscreen and Dual Touch	CF-VPF11U

Please consult your reseller or Panasonic representative before purchasing.

[1]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.

[2]A full set of Windows XP drivers are available at panasonic.ca

[3]Total usable memory will be less depending upon actual system configuration. Maximum of 4GB of memory when equipped with camera. Windows 7 64-bit max. VRAM is 1696MB with 4GB of memory.

[4]1GB = 1,000,000,000 bytes.

[5]1000 nit without ambient light assistance. Up to 6500 nit in clear, sunny conditions under direct sunlight.

[6]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.

[7]Requires software and activation to enable theft protection.

[8]Accessories and Integrated Options may vary depending on your notebook configuration.

[9]10.65V, 5700mAh.

TOUGHBOOK

SOLUTIONS FOR BUSINESS