

Windows®. Life without Walls™.
Panasonic recommends Windows 7.



TOUGHBOOK

When it's worth doing better.

CF-19



Rugged, Convertible mobile PC
that withstands shocks, spills, and dust

OS	Genuine Windows® 7 Professional
CPU	Intel® Core™ i5-520M Processor (1.2GHz with Turbo Boost up to 2.0 GHz, Intel® Smart Cache 3MB)
Colour TFT-LCD	10.4" XGA
HDD	160 GB*2
RAM	2 GB*1 (8 GB Max)


Functions as a usual mobile PC in the office.


Functions as a tablet PC with the monitor screen flipped over.

By pressing the screen rotation button, the screen display is turned 4 ways.



 High-brightness LCD (1,000 cd/m²)*3 with Circular Polarising Touch Screen and Anti-Reflection (AR) coating for easy viewing under direct sunlight.

 Full magnesium alloy case with Hand Strap ensured by a 180 cm 6 Feet free-fall test.*4

 Operates with the standard battery for approx. 9 hours.*5

 The screen turns 180° Ruggedised, 2D hinge used.

 Built-in security chip(TPM)*6 for data protection.

Various options can be built-in*7
— GPS, 3G WWAN, Fingerprint reader, Camera.

*1 1 MB = 1,048,576 bytes/1 GB = 1,073,741,824 bytes. *2 The HDD is 1 GB (1,000,000,000 bytes) in capacity. The actual capacity may be less than displayed, depending on the OS and application software. *3 Average luminance in the middle of the screen at the time of shipping. This may change depending on the environment and length of use. *4 Test conducted in non-operating condition. The shock resistance, vibration resistance, dust-proof, and splash-proof functions are not a guarantee against damage or malfunction. *5 The period of battery operation time varies according to the operating environment, LCD brightness, and system settings. Windows Vista Business, measured using MobileMark® 2007 at LCD brightness: 60 cd/m². Varies depending on the usage conditions, or when an external device is attached. *6 Available for some countries' model. Need to set-up TPM Professional Package. Refer to the Installation Manual of "TrustedPlatform Module (TPM)". *7 For details, contact your Panasonic sales representative. * The shock resistance, vibration resistance, dust-proof, and splash-proof functions are not a guarantee against damage or malfunction.

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The Panasonic Toughbook CF-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)¹
 - MIL-STD-461F certified¹
 - IP65 certified sealed all-weather design¹
 - 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™ i5-520M Processor
 - 1.2GHz with Turbo Boost up to 2.0GHz
 - Intel® Smart Cache 3MB
- STORAGE & MEMORY**
- 2GB SDRAM (DDR3-1066MHz) standard, expandable to 8GB^{2,3}
 - 160GB hard drive (shock-mounted flex-connect with quick-release)³
 - 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 colours
 - Intel® QM57 (GMA 4500MHD video controller) max. 1024MB UMA VRAM on XP2
 - 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
D-sub 15-pin
Mini-jack stereo
Mini-jack stereo
D-sub 9-pin
50 ohm coaxial
4-pin
4-pin
RJ-45
RJ-11
 - VGA
 - Headphones/speaker
 - Microphone/line in
 - Serial
 - Ext. antenna conn. (x 2)
 - USB 2.0 (x 2)
 - IEEE 1394a (FireWire)*
 - 10/100/1000 Ethernet
 - 56K Modem*
- WIRELESS**
- Optional integrated 3G WWAN
 - 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)⁴
 - Battery charging time: 3.5 hours⁴
 - 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
 - Cable lock slot
 - Trusted platform module (TPM) security chip v.1.24
 - Computrace® theft protection agent⁵
 - Optional fingerprint reader
 - Optional SmartCard reader
- WARRANTY**
- 3-year limited warranty, parts and labour
- DIMENSIONS & WEIGHT**
- 21.6 (L) x 27.1 (W) x 4.9cm (H)
 - 2.3Kg



- **Convertible Notebook to Tablet Design**
- **The First MIL-STD-810G Certified Tablet PC¹**
- **6-foot Drop and IP65 Certified¹**
- **Sunlight-viewable Display with Panasonic CircuLumin™ Technology**
- **Full Magnesium Alloy Case with Hand Strap**
- **Shock-mounted Flex-connect Hard Drive with Quick-release**
- **3G WWAN and GPS-ready Design**

INTEGRATED OPTIONS⁶

- 3G WWAN
- 2.0MP camera with auto focus and dual LED light⁷
- GPS receiver
- Backlit keyboard
- Sealed rubber or plastic emissive
- SmartCard reader
- Fingerprint reader
- HDD and battery lock

ACCESSORIES⁶

- AC Adapter (3-pin) CF-AA5803AM
- Battery Charger CF-VCBTB1W
- Lithium Ion Battery Pack⁸ CF-VZSU48U
- Dual Touch Replacement Stylus (for Digitizer) CF-VNP012U
- Touchscreen Replacement Stylus CF-VNP003U
- Vehicle Port Replicator
 - Standard CF-WEB184
 - Authentication CF-WEB194AC
 - Desktop Port Replicator CF-WEB181AU
- RAM
 - 2GB DDR3 CF-WMBA902G
 - 4GB DDR3 CF-WMBA904G

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 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.
- 3 1GB = 1,000,000,000 bytes.
- 4 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.
- 5 Requires software and activation to enable theft protection.
- 6 Accessories and Integrated Options may vary depending on your notebook configuration.
- 7 Camera replaces the second memory slot located on the bottom of the PC.
- 8 10.65V, 5700mAh.

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