

Panasonic recommends Windows® XP Tablet PC Edition



Centrino®
Duo

Dual-core.
Do more.



THE RUGGED CONVERTIBLE TOUGHBOOK® TOUGHBOOK CF-19

Based on
Intel® Centrino® Duo Mobile Technology

Operating System:
Genuine Windows® XP Professional or
Genuine Windows® XP Tablet PC Edition 2005

Vibration and shock resistant (MIL-STD 810F)

Water and dust resistant (IP54, MIL-STD 810F)

Lightweight at just 2.25kg



High-brightness 10.4" LCD with Touch or
Digitizer Screen

Long battery life of up to 8 hours

Firewire (IEEE1394a), USB 2.0 and serial port

Bluetooth® and WLAN integrated

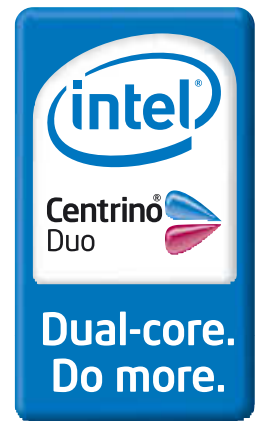
Optional integrated UMTS/HSDPA module

TOUGHBOOK®

Panasonic
ideas for life

Information at www.toughbook.eu

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Featuring a revolutionary LCD screen that transforms from a high-performance notebook to a fully portable tablet PC, the CF-19 Convertible tablet PC is reliable, durable and lightweight at just 2.25kg. The optimised display technology with low reflection allows for perfect visibility even in bright environments. The LCD itself is protected by a durable scratch resistant magnesium alloy case, mounted to the base cabinet with an extremely robust and dust resistant two-dimensional hinge. The data is secured on the hard disk drive – enclosed in a shock-absorbing damper that sits inside an aluminium case. A double waterproof structure ensures a tight durable seal that complies with IP54 water and dust-proofing standards, and a special HDD-heater that counters any adverse temperatures. Boasting these striking features means you can rely on the CF-19, even in extreme conditions.

The Intel® Centrino® Duo Mobile Technology promises high performance and efficient energy consumption. Thanks to two antennas located in the top of the display unit an optimum WLAN data transfer can be achieved. The high-power battery allows for a running time of up to 8 hours. The CF-19 is available with a Touchscreen and preloaded Windows® XP Professional or with a Digitizer Screen and Windows® XP Tablet PC Edition for pen based computing.



Mobile Computing Platform	Intel® Centrino® Duo Mobile Technology – Intel® Core™ Duo Processor ULV U2400 (1.06GHz, 2MB L2 cache, 533MHz FSB) – Intel® 945GM Chipset – Intel® PRO/Wireless 3945ABG network connection, supporting IEEE 802.11a/b/g (max. 54Mbps)
OS	Genuine Windows® XP Professional (Service Pack 2 with Advanced Security Technologies) or Genuine Windows® XP Tablet PC Edition 2005
RAM	512MB DDR2-533 SDRAM [expandable to 4096MB]
Graphic Chip	Intel® 945GM graphic controller, UMA (unified memory architecture) up to 128MB
HDD	80GB [shock resistant; withstands a 90cm drop]
LCD	10.4" anti-glare XGA Active Matrix (TFT) colour LCD, 1024x768 pixels (XGA), 16 million colours – Touchscreen version with Windows® XP Professional (up to 460cd) – Digitizer Screen version with Windows® XP Tablet PC Edition (up to 550cd)
LCD Cabinet	Full magnesium alloy
Bluetooth®	Version 2.0 + EDR
WLAN	IEEE 802.11a/b/g (max. 54Mbps); slide on/off switch
LAN	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX
Modem	Data: 56kbps (V.92), FAX: 14.4kbps
Sound	SigmaTel™ STAC9200 [AC-97 V.2.1 compliant], supporting Intel® High Definition Audio Subsystem Monaural speaker (integrated in display cabinet), software control of sound volume [FN + F5/F6 keys]
Input Devices	Touchscreen or Digitizer, Touchpad and Keyboard (82-key with dedicated Windows® key)
Indicators	9 LEDs [Power, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, SD Card, WWAN, Wireless Data Transfer]
Interfaces	Serial (16550A compatible): Dsub, 9-pin External display (VGA port): Mini D-sub, 15-pin Headphone: Mini-jack, 3.5 DIA Microphone: Mini-jack, 3.5 DIA, mono DC In: Jack USB 2.0: 2x 4-pin Modem: RJ-11 LAN: RJ-45 Firewire (IEEE1394a): 1x 4-pin External Antennae: 2x [Dedicated 50Ω coaxial connector] Port replicator: 100-pin
Expansion Slots	PC Card: 1x Type I or Type II (3.3V: 400mA, 5V: 400mA) Express Card: 1x ExpressCard/34 or ExpressCard/54 SD Memory Card: 1x [Data transfer rate = 8MB per second] Optional RAM Module: 1x SO-DIMM [200-pin, 1.8V, DDR2 SDRAM, PC2-4200 Compliant]
Power	AC Adapter Input: 100 ~ 240V AC, 50Hz/60Hz; Output: 16V DC, 3.75A Battery: Li-ion [10.65V, 5.7Ah] Battery life: Approx. 4.5 - 8 hours [Battery Mark 4.01 – max./min. brightness] Charging time: Power off: approx. 4.5 hours
Power Management Software	Standby function, Hibernation function, ACPI BIOS Windows® Media Player 10, Adobe® Reader, Intel® Matrix Storage Manager, Intel® PRO/Wireless Software, Bluetooth® Stack for Windows® by TOSHIBA, Wireless Switch Utility, Panasonic Hand Writing*, Software Keyboard*, Display Rotation Tool, DMI Viewer, PC Information Viewer, SD Utility, Battery Recalibration Utility, Infineon TPM Professional Package, Recover Pro™ 6, Hard Disk Data Erase Utility, Setup Utility, PC-Diagnostic Utility [* Windows® XP Professional model]
Security Feature	TPM (Trusted Platform Module, TCG V1.2 compliant) Password security [supervisor password, user password, hard disk lock] Integrated hardware security lock slot
Dimensions (WxHxD)	271mm x 49mm x 216mm / 10.7" x 1.93" x 8.5" (excluding protrusions)
Weight	Touchscreen version: 2.25kg / 4.96lb, Digitizer version: 2.3kg / 5.07lb (including battery)
Integrated Options	GPS (WAAS), Fingerprint Reader, UMTS/HSDPA module
Accessories	512MB RAM module: CF-WMBA5512C 1GB RAM module: CF-WMBA5016C Battery pack: CF-VZSU48U Battery charger: CF-VCBTB1W Car-Mount: CF-WEB184 Port-Replicator: CF-VEB181U Combo-Drive (USB): CF-VDRRT3U AC adapter: CF-AA1633AE, CF-AA1633AG, CF-AA1633AT
Testing Standards	Water resistance test: IEC529 [JIS C0920] IPX4, MIL-STD 810F 506.4-III Dust resistance test: IEC529 [JIS C0920] IP5X, MIL-STD 810F 510.4-Level Gravity drop resistance test: MIL-STD 810F 516.5 [90cm drop] Vibration resistance test: MIL-STD 810F 514.5 category 24 EMI test: MIL-STD 461E

Specification and configuration may vary depending on country. Accessories may vary depending on your notebook configuration. Consult a Panasonic sales office near you for more details and availability of integrated options.

As an ENERGY STAR® Partner, Matsushita Electric Industrial Co., Ltd. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. Active Matrix colour display conforms to industry standards. Some displays may contain isolated illuminated or dark pixels as an artefact of the manufacturing process (effective pixels: minimum 99.998%). RAM capacity calculated as follows: 1MB = 1,048,576 bytes. HDD capacity calculated as follows: 1GB = 1,000,000,000 bytes.

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