

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

**Panasonic**  
ideas for life



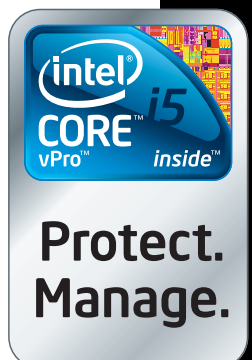
## TOUGHBOOK CF-19 THE RUGGED CONVERTIBLE TOUGHBOOK.

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 2.3kg. The optimised display technology with low reflection allows for perfect visibility even in direct sunlight environments (up to 1000cd/m2).

The LCD itself is protected by a durable scratch-resistant magnesium alloy case, mounted to the base cabinet with a reinforced 180 degree rotatable hinge. 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 IP65\* water and dust-proofing standards and a special HDD-heater counters any adverse temperatures. These striking features ensure that you can rely on the CF-19, even in extreme conditions.

- Intel® Core™ i5-540UM vPro™ processor
- Genuine Windows® 7 Professional Business. Downgrade option to Genuine Windows® XP Professional Service Pack3
- Vibration and shock resistant (MIL-STD 810G)\*
- Water and dust resistant (IP65, MIL-STD 810G)\*
- Lightweight at just 2.3kg
- Extremely bright 10.4" LCD with Dual Touch or Touchscreen (up to 1000cd/m2)
- Long battery life of up to 10 hours
- Firewire (IEEE1394a), USB 2.0 and serial port
- Bluetooth™ and WLAN integrated
- 3G Broadband optional (UMTS/HSPA with Gobi-Chip)

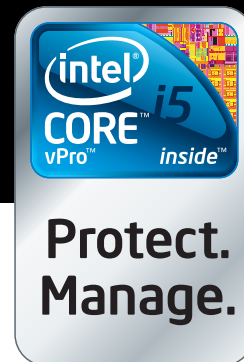
\* Tested by an independent third party lab following IEC 60529, sections 13.4, 13.6.2, 14.2.5, 14.3



**TOUGHBOOK**

[www.toughbook.eu](http://www.toughbook.eu)

# MOBILE BUSINESS EXCELLENCE



The Intel® Core™ i5 with vPro™ technology and Intel® Core™ i5 Duo processor delivers high performance and efficient energy consumption. Embedded WLAN and optional 3G Mobile Broadband capabilities enable wireless data transfer for business communication. The high-power battery allows for a running time of up to 9 hours.



Mobile Computing Platform	- Intel® Core™ i5-540UM vPro™ processor (1.2GHz, 3MB Intel® Smart Cache) - Intel® 5 series Express chipset QM57 - Intel® Centrino® Advanced-N 6200 AGN WLAN	
OS	Genuine Windows® 7 Professional Downgrade option to Genuine Windows® XP Professional Service Pack 3 (Touchscreen Model) or Windows® Tablet PC Edition Service Pack 3 (Dual Touch Model)	
RAM	2GB DDR3 SDRAM (max. 4GB)	
Graphic Chip	Intel® HD Graphics, UMA (Windows 7 max. 763MB, Windows XP max. 1024MB)	
Storage	160GB HDD (SATA, easy accessible, shock resistant - withstands 180cm* drop)	
LCD	10.4" sunlight-viewable XGA Active Matrix (TFT) colour LCD with up to 1000cd/m2 - Touchscreen model or - Dual Touch model (Touchscreen and Digitizer) 1024 x 768 pixels (XGA); 16 million colours; Concealed Mode	
Cabinet	Full magnesium alloy with handstrap	
Bluetooth™	Version 2.1 + EDR	
WLAN	Intel® Centrino® Advanced-N 6200 AGN WLAN	
LAN	1000BASE-T / 100BASE-TX / 10Base-T	
Modem	Data : 56 kbps V.92; FAX : 14.4 kbps / voice not compatible	
Sound	Intel® High-Definition audio compliant Monaural speaker (integrated in display cabinet)	
Input Devices	Touchscreen or Dual Touch LCD, Touchpad and Keyboard	
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 Dsub, 15-pin
	Headphone:	Mini-jack, 3.5 DIA
	Microphone:	Mini-jack, 3.5 DIA, stereo
	DC In:	Jack
	USB 2.0:	2x 4-pin
	Modem:	RJ-11
	LAN:	RJ-45
	Firewire (IEEE1394a):	1x 4-pin
	External Antenna:	2x (Dedicated 50Ω coaxial connector)
	Port Replicator:	100-pin
Expansion Slots	PC Card:	1x Type II (3.3V: 400mA, 5V: 400mA)
	Express Card:	1x ExpressCard/34 or ExpressCard/54
	SD/SDHC Memory Card:	1x
	Optional RAM Module:	1x DDR3 200-pin SO-DIMM (1.8 V, DDR3 SDRAM, PC3-6400 Compliant)
Power	AC Adapter:	Input: 100 - 240V AC, 50Hz/60Hz; Output: 16V DC, 3.75A
	Battery:	Li-ion 11.1V, 5.6Ah(typ) 5.3Ah(min)
	Battery Life:	Approx. 9 hours (Mobile Mark™ 2007, 60cd/m², Windows 7® Touchscreen Model)
	Charging Time:	Power off: approx. 3.5 hours; Power on: approx. 3.5 hours
	Power Consumption:	Approx. 60W (maximum when recharging)
Power Management	Standby function, Hibernation function, ACPI BIOS	
Software	Adobe Reader, PC Information Viewer, Loupe Utility, Intel® PROSet/Wireless Software, Bluetooth™ Stack for Windows® by TOSHIBA, Wireless Switch Utility, Hotkey Settings, Battery Recalibration Utility, Panasonic Hand Writing, Display Rotation Tool, Infineon TPM Professional Package, Power Saving Utility, Wireless Connection Disable Utility, Concealed Mode Utility Setup Utility, Hard Disk Data Erase Utility, PC-Diagnostic Utility	
Security Features	TPM (Trusted Platform Module, TCG V1.2 compliant), Integrated hardware security lock slot, Password security (supervisor password, user password, HDD Lock)	
Dimensions (WxHxD)	271mm x 49mm x 216mm / 10.7" x 1.93" x 8.5" (excluding protrusions)	
Weight	Approx. 2.3kg / 5.07lb (including battery)	
Integrated Options	GPS, Fingerprint Reader, Smart Card Reader, 3G Mobile Broadband (HSPA, up to 7.2Mbps), Solid State Disk, 2MP camera with dual LED light (project driven)	
Accessories	AC adapter:	CF-AA1633AE, CF-AA1633AG, CF-AA1633AT
	Battery charger:	CF-VCBTB2W
	Battery pack:	CF-VZSU48U
	Car-Charger:	CF-AAV1601AW (Type A, 60W, 12V/24V), CF-LIND8024FD (EIAJ & Type A both 80W, 12-32V)
	Car-Mount:	CF-WEB194B
	Port-Replicator:	CF-VEB181AU
	RAM modules:	CF-WMBA902G (2GB)
Testing Standards	Water resistance test:	IEC529 (JIS C0920) IPX5*, MIL-STD 810G 506.5, III*
	Dust resistance test:	IEC529 (JIS C0920) IP6X*, MIL-STD 810G 510.5, Level*
	Gravity drop resistance test:	MIL-STD 810G 516.6, (180cm* drop)
	Vibration resistance test:	MIL-STD 810G 514.6, category 20 % 24*

As an ENERGY STAR® Partner, Panasonic Corporation 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. Toughbook is a brand name and registered trademark of Panasonic Corporation. Acrobat® is a registered trademark of Adobe® Systems Incorporated. Intel, Intel Inside, the Intel Inside logo, Core, Intel Centrino, and the Intel Centrino logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft® and Windows® are registered trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies. All rights reserved.

All working conditions, times and figures quoted are optimum or ideal levels and may differ as a result of individual and local circumstances.

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