



TOUGHBOOK CF-31

THE FULLY RUGGED, FULL-SIZE NOTEBOOK THAT DELIVERS DESKTOP PERFORMANCE.

Specifically designed for field-based professionals working in challenging environments, the new fully rugged Toughbook CF-31 offers the ideal balance between the latest technology and supreme ruggedness. Whether working in adverse weather, wet conditions, underground or where space restrictions would usually hamper productivity, the CF-31 ensures that mobile workers perform to their optimum, at all times.

- Intel® Core™ i5-5300U vPro™ Processor
- Windows 10 Pro
Windows 7 Professional (available through downgrade rights from Windows 10 Pro)
- Intel HD 5000 graphics
- Vibration and shock resistant (MIL-STD 810G)*
- Water and dust resistant (IP65, MIL-STD 810G)*
- 13.1" high brightness outdoor display (up to 1.200cd/m²) with circular polarizer
- USB 3.0 SuperSpeed port
- Up to 18 hours battery life
- 4G mobile broadband optional (LTE, up to 100Mbps)
- Concealed Mode to switch PC into "silent mode"
- Backwards compatible with CF-30 docking stations and Car Mounter Kit**
- High flexibility and connectivity through new configurations such as second LAN, camera or GPS

* Tested by an independent third party lab following MIL-STD-810G and IEC 60529, Sections 13.4, 13.6.2, 14.2.5 and 14.3

** Limited functionality

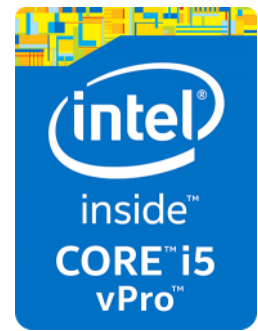


TOUGHBOOK

MOBILE BUSINESS EXCELLENCE

FOR FIELD PROFESSIONALS WHO FACE THE TOUGHEST CHALLENGES

The CF-31's desktop level performance is provided by the 5th generation Intel® Core™ i Processor architecture, allowing users to exploit job-specific, cutting-edge software.



Mobile Computing Platform	Intel® Core™ i5-5300U vPro™ processor (2.3GHz, 3MB Intel® Smart Cache)		
Operating System	Windows 10 Pro Windows 7 Professional (available through downgrade rights from Windows 10 Pro)		
RAM	4GB DDR3 SDRAM (max. 16GB)		
Storage	500GB HDD (SATA)		
LCD	13.1" sunlight-viewable XGA Active Matrix (TFT) colour LCD (up to 1.200cd/m ₂) with circular polarizer; concealed mode		
Cabinet	Full magnesium alloy with integrated carrying handle		
Bluetooth™	Version 4.0 + EDR Class 1		
WLAN	Intel® Dual Band Wireless-AC 7265 slide on/off switch		
LAN	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX, IEEE 802.3ab 1000 Base-T (2nd LAN Project Based)		
Audio	WAVE and MIDI playback, Intel® High Definition Audio subsystem support		
Input Devices	Resistive Touchscreen, Touchpad and Keyboard with 88 keys		
Interfaces	Serial (16550A compatible):	D-sub, 9-pin	
	External display (VGA port):	Mini D-sub, 15-pin	
	HDMI:	x1	
	Headphone:	Mini-jack, 3.5 DIA	
	Microphone:	Mini-jack, 3.5 DIA, stereo	
	DC Input:	Jack	
	USB 2.0:	x3, 4-pin	
	USB 3.0:	x1, 9-pin	
	LAN (2nd LAN optional, project based):	RJ-45	
	Firewire (IEEE1394a, optional, project based):	x1, 4-pin	
	External Antenna:	x1, Dedicated 50 ohms coaxial connector	
	Desktop Port Replicator:	80-pin	
	Expansion Slots	SD/SDXC Memory Card:	x1
	RAM Module (optional):	x1 DDR3L SDRAM	
Power	AC Adapter:	Input: 100 – 240V AC, 50Hz/60Hz; Output: 15.6V DC, 7.05.0A	
	Battery:	Li-ion (10.65V, Typical 8950 mAh / Minimum 8100mAh)	
	Battery Life:	Approx. 18h (Mobile Mark™ 2007, LCD brightness: 60cd/m ²)	
Power Management	Standby function, Hibernation function, ACPI BIOS		
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)	302mm x 73.5mm x 292mm / 11.9" x 2.9" x 11.5" (excluding protrusions)		
Weight	Approx. 3.72kg / 8.2lb (including battery)		
Integrated Options	GPS, Fingerprint Reader, Smart Card Reader, 4G Mobile Broadband (LTE, up to 100Mbps)		
Accessories	AC Adapter:	CF-AA5713A	
	Battery Charger:	CF-VCB82W	
	Battery Pack:	CF-VZSU46AU	
	Battery Pack (Multimedia Bay):	CF-VZSU1431U	
	Car Charger:	CF-LND1224A (120W, 24V)	
	Car Mounter Kit:	CF-WEB301	
	Desktop Port Replicator:	CF-VEB311	
	DVD Multi Drive (Multimedia Bay):	CF-VDM312U	
	Stylus Pen:	CF-VNP009U	
	Display Protection Film:	CF-VPF15U	
	Carrying and CDS Docking Solutions:	Please visit www.toughbook.eu	
	Testing Standards	Water resistance test:	IEC529 (JIS C0920) IP-X5*, MIL-STD 810G 506.5, III*
Dust resistance test:		IEC529 (JIS C0920) IP-6X*, 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, the Intel Logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. 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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