









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 8.1 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



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® $Core^{TM}$ 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 8.1 Pro	
	Windows® 7 Professional Downgrade	
RAM	4GB DDR3 SDRAM (max. 16GB)	
Storage	500GB HDD (SATA)	
CD	13.1" sunlight-viewable XGA Active Matrix (TFT) colour LCD (up to 1.200cd/m) 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	
.AN	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	
nput Devices	Resistive Touchscreen, Touchpad and Keyboard with 88 keys	
nterfaces	Serial (16550A compatible):	D-sub, 9-pin
interiaces	External display (VGA port):	Mini D-sub, 15-pin
	HDMI:	х1
	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	PC Card:	x1, Type I or Type II, Allowable current 3.3V, 400mA, 5V: 400mA
	Express Card:	x1, Express Card/34 or Express Card/54
	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 8550 mAh / Minimum 8100mAh)
	Battery Life:	Approx. 18h (Mobile Mark ™ 2007, LCD brightness: 60cd/m²)
Power Management	Standby function, Hibernation function, ACPI BIOS	Approx. Ton (10000 Fill)
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	••	
ntegrated Options	Approx. 3.72kg / 8.2lb (including battery) GPS, Fingerprint Reader, Smart Card Reader, 46 Mobile Broadband (LTE, up to 100Mbps)	
		DOAND (LTE, UP TO TOUMDPS) CF-AA5713A
Accessories	AC Adapter:	CF-VCBTB2W
	Battery Charger: Battery Pack:	CF-VCD1BZW CF-VZSU46AU
	Battery Pack (Multimedia Bay):	CF-VZSU1431U
	Car Charger:	CF-V23014310 CF-LND1224A (120W, 24V)
	Car Mounter Kit:	CF-UND1224A (120W, 24V) CF-WEB301
	Desktop Port Replicator:	CF-VEB311
	DVD Multi Drive (Multimedia Bay):	CF-VEBST1
	Stylus Pen:	CF-VDP009U
	Display Protection Film:	CF-VNF0090 CF-VPF15U
	Carrying and CDS Docking Solutions:	CT-YFF15U 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-X3", MIL-STD 8100 300.3, III" IEC529 (JIS C0920) IP-6X*, MIL-STD 8106 510.5, Level*
		MIL-STD 810G 516.6 (180cm drop)*
	Gravity drop resistance test:	MIL-סוט סוטט סוס.ס (וסטכווו מוטף))*

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 99,99%). RAM capacity calculated as follows: 1MB = 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 Vore, Intel Vore, 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 ther hand 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.



^{*} 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