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TOUGHBOOK CF-31 VALUE MODEL

THE FULLY RUGGED, FULL-SIZE NOTEBOOK WITH
BALANCED-LIGHT SPECIFICATION.

Specifically designed for field-based professionals who work in challenging environments and need business entry-level specification, the new Toughbook CF-31 Value Model makes the legendary durability of fully rugged Toughbooks more accessible than ever.

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.

- Genuine Windows® 7 Professional (Downgrade option to Genuine Windows® XP Professional Service Pack3)
- Intel® Core™ i3-350M with Intel HD graphics
- 13.1" high brightness display
- Certified by MIL-STD 810G* and IP65*
- Backwards compatible with CF-30 docking stations and carmounters**

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

** Limited functionality



TOUGHBOOK

When it's worth doing better.

www.toughbook.eu

MOBILE BUSINESS EXCELLENCE



FOR FIELD PROFESSIONALS LOOKING FOR A BALANCE BETWEEN FULLY RUGGEDNESS AND ENTRY-LEVEL SPECIFICATION.

The CF-31's business-class performance is provided by the latest Intel® Core™ i3 processor architecture, whilst a 1,100cd/m2 (typical), 13.1" LED backlit display (4:3) also means the CF-31 can be viewed on the move.



Mobile Computing Platform	- Intel® Core™ i3-350M processor (2.26GHz, Intel® Smart Cache 3 MB) - Mobile Intel® 5 HM55 Express Chipset		
Operating System	Genuine Windows® 7 Professional (Downgrade option to Genuine Windows® XP Professional Service Pack3)		
RAM	2GB DDR3 SDRAM (max. 4GB)		
Graphic Chip	Intel® HD Media, UMA (Windows 7 max. 763MB, Windows XP max. 1024MB)		
Storage	160GB HDD (SATA)		
LCD	13.1" Active Matrix (TFT) colour LCD (up to 1,000cd/m2 typical) 1024 x 768 pixels (XGA); 16 million colours, concealed mode		
Cabinet	Full magnesium alloy with integrated carrying handle		
Bluetooth™	Version 2.1 + EDR; slide on/off switch		
WLAN	IEEE 802.11 b/g/h compliant; slide on/off switch		
LAN	IEEE 802.3 10 Base-T, IEEE 802.3u 100 Base-TX, IEEE 802.3ab 1000 Base-T		
Audio	WAVE and MIDI playback, Intel® High Definition Audio subsystem support		
Input Devices	Touchscreen, Touchpad and Keyboard with 88 keys		
Interfaces	Serial (16650A compatible)	D-sub, 9-pin	
	External display (VGA port)	Mini D-sub, 15-pin	
	HDMI		
	Headphone	Mini-jack, 3.5 DIA	
	Microphone	Mini-jack, 3.5 DIA, stereo	
	DC-In	Jack	
	USB 2.0	4x 4-pin	
	Modem (optional)	RJ-11	
	LAN	RJ-45	
	External Antenna	1x (Dedicated 50 Ohm coaxial connector)	
	Port Replicator	80-pin	
	Expansion Slots	PC Card	1x Type I or 1x Type II
		Express Card	1x /34 or /54
		SD/SDHC Memory Card	1x
Power	RAM Module	1x DDR3 SDRAM, 204 Pins SO-DIMM (1.5V, SO-DIMM, PC3-8500 compliant)	
	AC Adapter	Input: 100 - 240V AC, 50Hz/60Hz; Output: 15.6V DC, 7.05A, 110W	
	Battery	Li-ion (11.1V, 5.2Ah typical)	
	Battery Life	Approx. 7h (Windows® 7 model, Mobile Mark™ 2007, LCD brightness: 60cd/m2)	
	Charging time	Approx. 4h (Power on), 3h (Power off), depends on situation	
	Power Consumption	Approx. 100W (maximum when recharging)	
Power Management	Standby function, Hibernation function, ACPI BIOS		
Software	Adobe Reader, PC Information Viewer, Loupe Utility, Bluetooth™ Stack for Windows® by TOSHIBA, Wireless Switch Utility, Wireless Connection Disable Utility, Hotkey Settings, Battery Recalibration Utility, Infineon TPM Professional Package, Protector Suite QL, Aptio Setup Utility, Hard Disk Data Erase Utility, PC Diagnostic Utility, Concealed mode Utility		
Security Features	Integrated hardware security lock slot, Password security (supervisor password, user password, HDD lock)		
Dimensions (WxHxD)	302mm x 73.5mm x 29.2mm (11.9" x 2.9" x 1.15") (excluding protrusions)		
Weight	Approx. 3.6kg (Approx. 7.9lb.)		
Integrated Options	GPS, Fingerprint Reader, Smart Card Reader, 3G Mobile Broadband (HSPA, up to 7.2Mbps), Firewire (on Project Base)		
Testing Standards	Water resistance test	IEC529 (JIS C0920) IP-X5*, MIL-STD 810G 506.5- I & III*	
	Dust resistance test	IEC529 (JIS C0920) IP-6X*, MIL-STD 810G 510.5- I & II*	
	Gravity drop resistance test	MIL-STD 810G 516.6 IV* (180cm drop)	
	Vibration resistance test	MIL-STD 810G 514.6- I & II*	
	Accessories	Desktop Port Replicator	CF-VEB311
	Car Mounter Kit	CF-WEB301	
	AC Adapter	CF-AA5713A	
	Battery	CF-VZS46AU	
	DVD Multi Drive (Multimedia Bay)	CF-VDM311U	
	Stylus Pen	CF-VNP009U	

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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