

PROCESSOR	Intel Pentium M 733 (ULV)
MEMORY	512MB DDR SDRAM
HARD DRIVE	Hitachi 40GB
SCREEN SIZE AND TYPE	10.3-inch TFT
DISPLAY RESOLUTION	1024 x 768 pixels
GRAPHICS CARD	Intel 855
DIMENSIONS	275 x 218 x 54mm
WEIGHT	2.2kg
PC CARDS (TYPE II/III)	2/1
WIRELESS LAN	Intel 802.11g
ETHERNET	10/100
MODEM	Yes
USB PORTS	2
FIREWIRE	No
STANDARD WARRANTY	3 yrs RTB
WARRANTY UPGRADE	Price On Application (POA)
CONTACT	08700 100464 www.panasonic.co.uk

VALUE FOR MONEY	6
PERFORMANCE	6
FEATURES	8
MOBILITY	8
BUILD QUALITY	9
OVERALL	8

BATTERY LIFE MINUTES	MOBILEMARK 2002	3DMARK 2001
358	147	1874

**RUGGED LAPTOP ON TEST**



# PANASONIC TOUGHBOOK CF-18

RATING  **8** PRICE **£1979/£2325** (EX/INC. VAT)

► **IN BRIEF:** A versatile laptop with a revolving screen that proved tough enough for you and your army

Panasonic is one of the leading innovators in the rugged laptop market and, with the Toughbook CF-18 (£2325 inc. VAT), it is proving that it can produce more than the standard industrial strength laptop. As with the Itronix GoBook III, this system has been designed to pass the Military Specification 810F standard, which means that it can be used reliably in the worst of environmental extremes. This isn't a laptop for the casual user, as the fully ruggedised body will testify. Rubber seals cover all external ports, which prevents moisture from penetrating the machine components.

The body of the Toughbook is made from compressed magnesium-alloy, which Panasonic claims is up to 20 times stronger than a standard laptop chassis. Toughbooks are tested to withstand damage from water, heat and rough handling. Weighing in at 2.2kg, what the Toughbook CF-18 really has in its favour is portability. For too long, the ruggedised laptop has been transportable as opposed to portable. The Toughbook CF-18 allows users to carry it with ease, making life a great deal simpler. In comparison to the GoBook, which weighs 3.8kg, the Panasonic offers true portability.

## MAIN SPECIFICATION

With such a closed unit, it's logical that Panasonic should opt for Intel's Ultra Low Voltage option in the form of an Intel Pentium M 733 chip, which runs at 1.1GHz. As is implied in the name, such a processor runs using a lower voltage, so a heatsink is not required as less heat is actually generated by the system.

Supported by 512MB DDR SDRAM, users will be able to run the staple suite of applications on the CF-18. With a MobileMark 2002 score of 147, the system is reasonable if not overly powerful. Fitted with a 40GB hard drive, storage may appear to be a little understated, but the drive is

suspended in a damper so as to reduce vibrations and potential damage to the disk when dropped.

The keyboard is compact and on the small side, but once we were accustomed to it, it proved reliable and comfortable to use. Less impressive was the toughened touchpad, which needs a firm hand and patience to make the most of. Fortunately, the 10.4-inch touchscreen allows for pen-input and we found using this method proved far easier to navigate than using the touchpad. The screen can be rotated 180-degrees, allowing for use in slate mode, which keeps the unit compact.

Rather than raw processing power, field-workers will be looking for usability from their laptop, and the Toughbook CF-18 manages to pack that into its sealed unit. When it came to testing the battery of the Toughbook, we found that it lasted, on average, for 358 minutes, which should see the average field operative active for long periods of the day. Once again, this proved more usable than the 147 minutes produced by the GoBook III.

Car mounted recharges are an option, which means that the mobile user could effectively stay active for a full day, stopping once to recharge. Additional options match those to be found from Itronix, with GSM/GPRS, Bluetooth and GPS modules all coming at an additional cost. Dependent upon your company's needs, they can be added at the time of purchase.

Two versions of the tablet are available, one running the standard Windows XP Professional Edition, with Windows XP Tablet PC Edition being a second option. Our review unit came supplied with the former but the use of a touchscreen, as opposed to the digitised screens found in Tablet PCs, still allows for pen input.

The Panasonic Toughbook CF-18 brings a new twist to the rugged laptop format. While users will appreciate the lighter size and compact nature of this laptop, what makes it more impressive is that Panasonic has managed to cram as much cutting-edge technology into the unit as possible, while keeping the unit cool and compact.