

## FIELD TECH - Panasonic CF-18 Toughbook

### Technology for Field and Bush

by Charlie Brewer published on 2 May 2006

Welcome to this, the first, of Pocket-lint's new "Field Tech" Column. Every month we will be looking at technology specifically designed to carry on working even in the harshest of conditions, and we've decided to start with the world's toughest Tablet PC. Panasonic's range of rugged and semi-rugged Toughbook computers have been on the market for a while but seldom see a lot of high street publicity. Designed for engineers, surveyors and professionals who need to worry more about getting their job done than their computer breaking down after being throw in the back of a truck, the Toughbooks design reflect more of the requirements of the school of hard knocks than the latest in home computing conventions. To appreciate how different the CF-18 table PC Toughbook is from everything else on the market it's best to look at the specifications of the bodywork surrounding the computers core. The armoured-body measures 271mm wide, by 216mm long by 49mm deep and weighs in at 2.1kg. To keep the weight down, the outer shell is constructed from a magnesium alloy, 20 times harder than standard ABS plastic. All the standard ports are sealed with rubber-bung style plugs to prevent the dust and moisture from the outside, getting inside. The larger doors, that cover the 6.5hour battery, PCMCIA and SD slots and removable hard drive have a locking mechanisms that would sub-mariners envious and extra work has gone into the construction of the high stress areas of the tablets screen hinge and main release catch, both looking like they've been designed with roadies in mind. Under the shell, the core of the PC is powered by an Intel Pentium M Processor ULV 753 (Centrino) chip, delivering 1.20GHz of processing power and 512MB of RAM. The 60GB internal hard drive has been integrated into a removable, shock-resistant, steel lined cartridge that's impact resistant to falls of up to 90cm. Should damage occur or drives need to



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be swapped, a handy feature when large quantities of data need to be sent back to base, then it as easy to change the hard drive as it is swap the 7.4V Li-Ion battery. As the CF-18 is designed to be used in the field, quite literally, the anti-reflective 10.4 inch, 65K colour, display has been designed to be daylight viewable. Depending on the requirement of the user the type of touch-screen can be altered to either be stylus and pressure sensitive, so anything can be user to move the cursor or electronic stylus dependant so only a specially supplied pointing device will be compatible. Regardless, a tethered stylus is supplied and is stored in the bottom left hand side of the screen. The display is rotated by disengaging the catch at the rear of the keyboard and rotating the screen clockwise through 180 degrees and closed over the keyboard, being locked in place by the main catch. Once in position the stylus comes into use, as do the bank of tablet control buttons located on the front right of the main catch. Due to the wide variety of locations the Toughbook has been designed to function in a 56k Modem is fitted as standard as well as a wireless, IEEE 802.11 a/b/g LAN but more exotic options are also available. For those further a field a SIM slot can be activated in the rear of the CF-18 allowing GSM/GPRS network communication and calls to be made. Toughbook also offer an GPS package, so once in great outdoors users can not only tell you exactly what the situation is, but exactly where they are as well. Panasonic have also opted to add an SD media slot, next to the two PCMCIA slots, located under the locking door on the left hand side, presumably as the many other devices in the range use this type of removable media. The professional status of the intended users is reflected in the lack of integrated CD/DVD drive, and although playing films of music might be regarded as frivolous, the ability to load software is not. Naturally centrally stored software can be installed either by connecting to a network, via the onboard LAN port, or alternatively connecting the computer to it's docking station (CF-VEB181U). In order to install disc based programmes or to

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## At a glance

### What is it?

Ruggedised tablet PC

### Good

Harder than a Sherman Tank track, removable shock-proof hard drive, touch screen, sealed ports, integrated Wireless LAN, SD card slot

### Bad

Price, lacks internal CD/DVD drive, compressed keyboard configuration, unresponsive tablet function buttons

### Verdict

A design and price that reflect the Toughbooks specialised nature, this tablet edition offers an armoured body around a fairly average PC chassis

**Price** £2842

**Our score**

**7/10**

**Your score**

**9/10**

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enjoy a movie the CFR-18 has to be attached to its dedicated USB-linked DVD/CD combo drive (CF-VDRRT3W). Despite the size of the flight case the CF-18 ships in Panasonic seem to wish to further promote the serious nature of their Toughbook but not including the combo drive in the price, meaning another £200 just to watch Bambi. With no immediate means of installing disc-based software, choosing the correct operating systems package at purchase becomes all important. Panasonic produces versions of the CF-18 with Microsoft Table PC software sitting on both Windows XP Home and Pro. The review model sent to us was running XP Pro, but seemed to lack any of the MS Works package that usually comes installed as standard, meaning this review was written in Notepad. Gripes, well only a couple. For the price Panasonic should supply the external combo-drive. I fully appreciate that the average professional user will be running pre-installed software, specifically designed for their job, but without the ability to play CD/DVD's the Toughbook can't be anything but a work tool, but maybe that's the idea. Second problem is the keyboard. The size and configuration of the keys are just too small and I'd really have done my block writing anything much longer than this review. The orientation of the arrow keys, and the size and placement of the delete, enter and capslock buttons also takes some getting used to, which is a pain. As an aside the tablet function keys, on the front right hand side of the review model, refused to work but I suspect that is more the fault of the last person to review the computer than the Toughbook.

## **VERDICT**

Overall I can see why the CF-18 is the professionals' choice. The hardened outer shell, shock-proof drive and dust and water resistant casing makes it idea for people on the move with difficult job to do, who their computer to function in any and all circumstances. The price and the lack of supplied combo-drive make it less attractive to the wider market but the smallish keyboard may also preclude news staff from

<http://www.pocket-lint.com/review/1523/panasonic-cf-18-toughbook-laptop-notebook>

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selecting the CF-18 as the computer they take to the frontlines, which is a shame as the larger, 13.3inch Toughbook C-29, is 1.6kg heavier.