





## NOTEBOOK REVIEW

### GETAC P470 review

Editors' Rating: 7.5 **VERY GOOD**

Service & support  7.5  
Design  7.5  
Features  8.0  
Battery life  7.0



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When it comes to rugged notebooks, [GETAC](#) has some of the toughest of them all in its inventory. The [P470](#) meets a range of standards for rugged notebooks, and is most definitely capable of performing in the field as well as in the office.

#### **Design**

Built into a tough magnesium alloy casing, the P470 is styled on the outside in slate-grey and black, with some eye-catching design indents on the lid section. An extremely robust carrying handle is built into the front of the system; this locks into a position fairly snug to the notebook's edge when not in use.

A hinge keeps upper and lower sections of the notebook together, although the clasp on our review sample was not quite as solid as we'd like. There are various status lights on the front edge of the notebook, which are visible when the lid is closed.

The P470 is a mid-sized notebook measuring 33.3cm wide by 29.5cm deep (including the handle) by 4.2cm thick. At 2.95kg, it's heavy compared to a conventional notebook of similar dimensions — the extra weight is down to the strong outer shell, plus various internal shock-absorbing and other ruggedising features.

The screen measures 14.1in. across the diagonal and has a native resolution of 1,280 by 800 pixels. The display is designed to be readable outdoors, and a button above the keyboard toggles an enhanced mode on and off. This simply seems to cause the screen to become brighter, but it does make a discernable difference to readability in natural light.

The display is a passive touch-screen that does not require a dedicated stylus to drive it, as active touch-screens do. Should you wish to use a stylus rather than a fingertip, there's a small handheld-type unit in a housing on the front left edge of the system.

The keyboard is spill resistant, and markings on the QWERTY and number keys are larger and brighter than normal — presumably to promote visibility in dim lighting conditions. The number keys are topped by a row of three-quarters-height function keys.

Above the keyboard is a bank of five buttons, including the aforementioned one that boosts readability outdoors. There's also an ECO-mode button that reduces the screen backlight and slows the processor's speed in order to conserve battery power. Two further user-programmable buttons can be set up to launch any chosen application, while the final button ejects the optical drive tray. The main on/off switch is also here.

The touchpad incorporates a scroll function on its right-hand and bottom edges, although there are no markings to indicate this. Beneath the touchpad are large left and right select buttons and, between these, a fingerprint sensor. You can toggle the touchpad on and off via a function key combination.

## **Features**

The GETAC P470 is built around an Intel Core 2 Duo T7400 processor running at 2.16GHz. This has 4MB of Level 2 cache and a 667MHz frontside bus (FSB). Our review sample had 1GB of DDR2 RAM, which is upgradeable to a maximum of 2GB. The graphics controller, which can dynamically utilise up to 128MB of system RAM, is integrated in the Intel 945GM chipset, although an optional configuration uses the 945PM chipset and discrete ATI M62 graphics with up to 256MB of dedicated video memory.

The P470 comes with Windows XP Professional preinstalled rather than Windows Vista, and there's no Vista option available at the time of writing. Microsoft Office Basic is also apparently included, although this was not installed on our review sample.

Wi-Fi (802.11a/b/g) and Bluetooth (2.0+EDR) are integrated, and a small applet allows you to turn these on and off individually. The icons on this applet are large enough to use with a gloved finger if necessary. The front-mounted panel of status lights mentioned earlier includes separate Wi-Fi and Bluetooth indicators.

An optional extra, included on our review sample, is a GPS receiver. This is accompanied by a location viewer displaying your latitude and longitude, and — if you're on the move — your speed, direction and altitude.

Our review sample also included a 1.3-megapixel camera in a fixed position above the screen, with a microphone alongside the lens. We generally prefer webcams to be swivel-mounted rather than fixed. However, the P470 is all about providing services while protecting the internals from the ingress of foreign objects, and a swivel mounted lens is a lot harder to protect than a fixed unit.

Another optional extra, not included on our review unit, is built-in wide-area wireless connectivity in the shape of a GSM/GPRS/EDGE/UMTS/HSDPA module.

The P740 is shock, drop and vibration resistant, conforming to [MIL-STD 810F](#). To that end the 120GB hard drive is shock mounted to help it resist knocks. The optical drive, mounted on the right-hand side, does not have any particular protection against dust or liquid getting into the caddy. This side also houses two vertically-stacked USB ports, protected by a rubber cover. These ports are very close together, and if your peripherals have large connectors you may only be able to use one at a time.

Towards the front of the right side is a SmartCard reader that can be used for added security over and above the fingerprint reader.

Much of the back edge is occupied by the 4,700mAh Li-ion battery, but there's room for a serial port and a VGA connector, each protected by a rubber cover, to the left and right respectively.

The remaining connectors are on the left-hand side. The microphone and headphone jacks at the rear are not protected at all, and nor is the adjacent power connector. A manual switch for Wi-Fi and Bluetooth (and 3G if supported) is also located on this edge.

Modem (RJ-11) and Ethernet (RJ-45) connectors sit side by side, protected by a rubber cover. Another rubber cover protects a third USB port, a flash card reader (supporting SD, MMC and Memory Stick media) and a mini-FireWire (IEEE 1394) port. The flash card reader is a little fiddly to use as it's very close to the rubber cover's hinge. A third rubber cover protects ExpressCard and PC Card slots. All of these rubber covers have secure fastenings.

### **Performance & battery life**

The GETAC P470 has a very impressive array of specifications, and we found it an easy notebook to work with.

Battery life is clearly very important in this kind of system, as it may need to go for extended periods away from a source of mains power. We tested battery life using the [Battery Eater](#) tool and got just 1 hour and 26 minutes from the standard battery. This is less than we would have liked by some margin. Anecdotally we worked for several stretches of a couple of hours at a time between charges without using Wi-Fi and with the ECO mode turned on. Still, it's doubtful whether you'll get a full day's work from a single battery charge.

As a result, we'd advise paying an extra £25 (ex. VAT) to upgrade the standard 6-cell 4,700mAh battery to a 9-cell 7,200mAh unit. For even greater peace of mind, you might consider adding the £88 (ex. VAT) media bay battery, a 3,600mAh unit, as well.

### **Conclusion**

The GETAC P470 is clearly designed for unusually harsh working conditions, and the level of protection it offers is mostly very good. However, we are concerned about the lack of protection for the optical drive and to a lesser extent the audio ports.

The touch-screen could prove handy in some environments, and we approve of the use of a passive display that can be driven by either fingertip or stylus. A longer, better weighted, more pen-like stylus would be preferable to the flimsy one provided, though.

### **Pros**

- Rugged build quality
- 2.16GHz Core 2 Duo processor
- Indoor/outdoor passive touch-screen display
- Low-power ECO mode

### **Cons**

- Little protection for the optical drive
- Fixed-position webcam
- Battery life could be better



<http://reviews.zdnet.co.uk/hardware/notebooks/0,1000000334,39292110,00.htm>