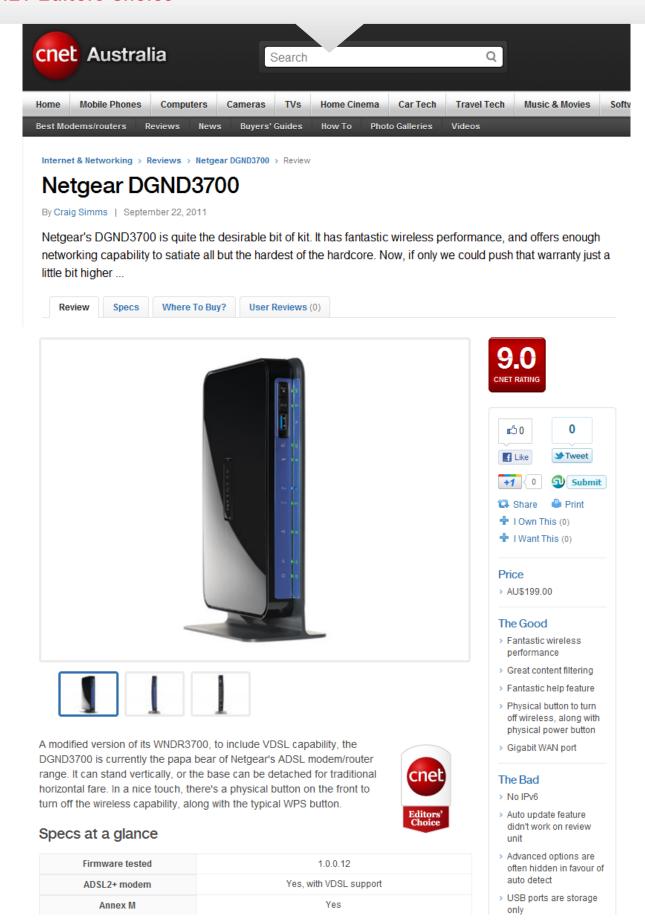
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3G modem	Through USB
IPv6	No
Wireless protocols	802.11b/g/n
Dual band	Simultaneous
Highest wireless security	WPA2
WDS	Yes
Ethernet ports	4x gigabit, 1x gigabit WAN
USB print sharing/storage	Storage, printers, 3G, pass through
Accessories	Ethernet cable, phone line filter, phone cable

Connections

The DGND3700 is one of those rare modem/routers that comes with a gigabit WAN port, much like the Fritz!Box 7390. This means that come the NBN, you theoretically shouldn't have to turf your old modem to take advantage of the faster speeds.

There are otherwise four gigabit Ethernet ports and a pair of USB ports, which, when used for storage, can be shared via SMB, HTTP and FTP, or can act as a DLNA server. Unlike its competitors, Netgear doesn't support printers, UPS, 3G modems or USB pass through, but it does allow you to keep a whitelist of authorised devices.



DSL line in, gigabit WAN port, 4x gigabit Ethernet ports, USB port, power switch and power jack. There's another USB port on the front — both are only USB 2.0, despite the blue colouring.

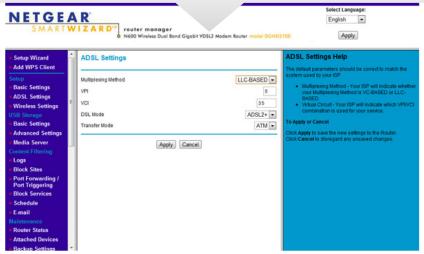
(Credit: Netgear)

UI and features

Netgear's UI is simple to use, but almost to a frustration. It actively hides the high-level configuration options, choosing to auto detect instead. Great for the neophyte; vexing for the advanced user.

Despite its general ugliness, it does provide excellent help down the right-hand side, though; something that we don't see often enough in modem Uls, although saving your settings is inexplicably slow. Just to change our ADSL password took 59 seconds.

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The right-hand frame contains useful contextual help. (Screenshot by CBS Interactive)

There are a few features that stand out from the norm: content filtering is impressive, allowing you to block sites, ports, set a schedule for these blocks and even send email alerts when someone tries to access a blocked site. Little pubescent Timmy would no doubt be slightly bewildered that you knew exactly what sites he was trying to visit.

There's an automated router upgrade, although this didn't work when we tried it, dumping us back to the status page and forcing us to manually upgrade the router.

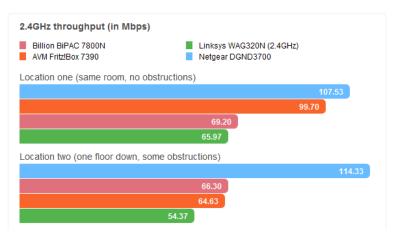
You can record the amount of internet traffic through the router, too, if you wish, allowing you to disconnect the internet or make one of the lights on the router flash orange once the limit (MBs or hours) has been reached. Those on TB plans will be out of luck here: the limit only supports six digits, locking you to a maximum of 999,999MB. We'd love to see Netgear go one step further, and throttle connections based on a MAC address, or refuse internet access to certain MACs should they exceed a pre-set, per MAC limit.

Performance

After analysing the spectrum with InSSIDer, an empty channel of either 1, 6 or 11 is chosen for 2.4GHz wireless testing. Usually, the router is restricted to the 20MHz band if the option is available.

We use iperf to determine throughput, running eight streams, with a TCP window size of 1MB and an interval of one second. The test is run for five minutes in three different locations, on two separate occasions. The locations are in the same room as the router: one floor down around spiral stairs and with concrete walls and floors, and two floors down under the same conditions.

The wireless throughput is tested using three chipsets (the Atheros AR5008X, Ralink RT2870 and Intel Ultimate-N 6300), and then all results are averaged.

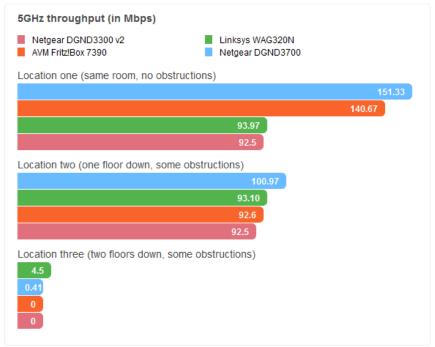


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(Longer bars indicate better performance)

Hot on the heels of the Fritz!Box dominating our charts, the DGND3700 comes in and absolutely trounces everything else in the 2.4GHz stakes.



(Longer bars indicate better performance)

We've subbed in the Netgear DGND3300 v2 here, as the Billion 7800N isn't capable of 5GHz wireless.

Meanwhile, the DGND3700 proves that it's good at 5GHz wireless performance, too, even managing to connect to the Intel chip in our difficult third location (scoring 0.41Mbps, something that's not really viewable on the graph above). It's only the second router to be able to connect at 5GHz from this position, the first being the Linksys WAG320N, and even then only to our Linksys-branded dongle. The score for the Netgear above is over the average of the three chipsets, and is therefore affected by two zero scores where it would not connect — the score alone for the Intel chipset was 1.23Mbps.

Warranty

Netgear covers the DGND3700 with a one-year warranty; disappointing, considering the two-year warranty from Billion, and the five-year warranty from AVM.

Conclusion

Netgear's DGND3700 is quite the desirable bit of kit. It has fantastic wireless performance, and offers enough networking capability to satiate all but the hardest of the hardcore. Now, if only we could push that warranty just a little bit higher ...