

LIGHTFAST NETWORKS · GPON FTTH

Uniden Voice on LightFast Networks GPON Fibre | FTTH

New communities on LightFast fibre have no copper phone line at all, so your phone system is your phone. Here is what GPON fibre to the home actually is, why glass suits voice better than anything before it, and how to get connected.

LightFast Networks builds open-access fibre in new Australian communities, symmetrical speeds up to **10 Gbps** over a **400 Gbps backbone**, a **99.95% uptime guarantee**, Australian engineers, and **100+ retail providers** to choose from. Because it is fibre to the home with no copper in the path, it removes the exact things that damage phone calls: distance attenuation, crosstalk, moisture in old pairs, and the brief jitter a speed test never shows you. It is also **symmetrical**, which matters far more for a business phone system than download speed does. The catch nobody mentions when you move in: **a new fibre estate has no landline**, so there is nothing to connect a traditional phone service to.

■ The short version

What damages calls	On copper (FTTN / FTTC / old lines)	On GPON FTTH
Distance attenuation	Real. Your performance depends on how far you are from the street cabinet.	✓ Not a factor across an estate
Crosstalk between pairs	Real, and worse when neighbours are busy.	✓ Physically impossible in glass
Moisture and corrosion	The classic intermittent fault. Calls fine in dry weather, awful after rain.	✓ Nothing metallic to corrode
Powered street cabinets	Present, and a shared failure point for the whole neighbourhood.	✓ Passive, no power in the field
Electrical interference	Real. Copper is an antenna.	✓ Light is immune
Upstream congestion	Severe on asymmetric plans, the top cause of bad calls in offices.	Solved by symmetrical service, not by fibre alone

Also worth knowing

Technology	Path to your premises	Upstream	Suitability for voice
GPON / XGS-PON FTTH LightFast estates	Glass all the way, passive splitting	Symmetrical, up to 10 Gbps published	✓ Best available
nbn FTTP	Glass all the way	Asymmetric tiers, up to 400 Mbps up on gigabit	✓ Excellent
nbn HFC	Fibre to a node, coaxial cable to you	Limited upstream; shared segment	Good, occasionally variable
nbn FTTC	Fibre to the kerb, short copper run	Modest	Usually fine, distance-sensitive
nbn FTTN	Fibre to a street cabinet, then copper	Weak, and degrades with distance	Workable but the common cause of quality complaints
5G / fixed wireless	Radio	Variable by cell load and conditions	Excellent as a backup path, riskier as the only one

Why the backbone figure is the one to notice

Anyone can advertise a big access speed. What determines whether you actually get it at 8pm is the capacity behind the access network and the engineering behind that. A published backbone figure and an uptime guarantee are the two numbers a wholesale network can be held to, which is why they are worth more attention than the headline speed.

Questions the full guide answers

- ☐ What is LightFast Networks, and is it the same thing as nbn?
- ☐ What does GPON actually mean in plain English?
- ☐ Why is fibre to the home better for a phone system than FTTN or FTTC?
- ☐ Our new estate has no landline. How do we get a business phone number?
- ☐ Do I need to buy handsets, or does it work on the apps?
- ☐ What are the honest downsides of a PON fibre network?
- ☐ How do we get connected, and how long does it take?

This is the summary. The guide has the detail.

Every point above is worked through in full on our site, with the Australian context, the numbers and the exceptions. If you would rather talk it through, call **1300 881 662** or visit **unidenvoice.com/get-started**.