Your FTTH/GPON and Enterprise Internet Troubleshooting Guide 💡

Experiencing internet issues can be frustrating, especially with complex fiber and Ethernet technologies. This guide is designed to help you quickly identify and resolve common problems for both **GPON (Gigabit Passive Optical Network / FTTH)** and **Enterprise (Dedicated Link / CPE)** clients, ensuring you know when to try a simple fix and when it's time to reach out for expert help.

We'll focus on problems related to your equipment: the **Fiber Optic Network Terminal (ONT)** for GPON users, and the **Customer Premises Equipment (CPE)** for Enterprise users, along with your Wi-Fi router.

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1. Problem: No Internet Access ❌

This is when your internet is completely down, and you can't browse, stream, or connect online.

1.1 GPON / FTTH Users (LHTZ- Service IDs)

Client Steps	Light Status Check (ONT)	Diagnosis & Action
Power Check	**Power light is OFF**	Ensure the power adapter is securely plugged into the modem and the wall outlet. Try a different outlet.
Fiber Signal	**LOS light is RED/blinking, or PON is OFF/blinking**	**Fiber Signal Loss.** Gently check the thin fiber optic cable (yellow/green) connecting to the modem. Ensure it's not bent, pinched, or damaged. Carefully unplug and re-plug the fiber cable at the modem end.
Local Connection	**Power & PON are SOLID GREEN, but LAN/WAN/Internet light is OFF or RED**	**Router or Temporary Glitch.** Perform a **Full Power Cycle:** Unplug *both* the fiber modem and your Wi-Fi router for **30-60 seconds**. Plug the modem (ONT) back in first. Wait for lights (especially PON) to stabilize (solid green). Plug in the Wi-Fi router.

Device Specific	*(Applies if other devices work)*	On the problematic device: Ensure Wi-Fi is ON and airplane mode is OFF. **"Forget"** the network and reconnect, or **Restart** the device.

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1.2 Enterprise / Dedicated Link Users (LTZ- Service IDs)

Client Steps	Light Status Check (CPE/Router)	Diagnosis & Action
Power Check	**CPE/Router Power light is OFF**	Ensure the device (CPE, media converter, or router) power adapter is securely plugged in and the wall outlet is working.
Physical Link	**LINK/ACT light (for the main WAN connection) is OFF or RED**	**Physical Ethernet Link Loss.** Check the Ethernet cable running from our outdoor equipment to your indoor device. Ensure it's not pinched and is securely connected at both ends. Perform a **Power Cycle** on the indoor device for **30-60 seconds**.
Internal Routing	**LINK/ACT light is SOLID GREEN, but no internet**	**Possible Routing/IP Conflict.** If possible, try connecting a computer directly to the main input port (bypassing your internal network). If the direct connection works, the issue is with your internal router/firewall. If it fails, escalate.

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When to Escalate 🚨

- **GPON:** If the **LOS light remains RED** or the **PON light stays OFF** after a power cycle and checking the fiber cable.
- **GPON/Enterprise:** If you've restarted all equipment and tested the connection (including a wired test if possible), and you still have **no internet access**.
- **Enterprise:** If the **LINK/ACT light remains OFF or RED** after checking the cable and restarting the equipment.

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2. Problem: Slow Internet Speed 🐢

Your internet works, but it's much slower than it should be, leading to buffering or lagging.

Client Steps	Action & Test	Diagnosis

Run Speed Test	Use a reliable speed test website (e.g., speedtest.net). Note your download/upload speeds and compare them to your subscribed plan.	Establishes a baseline for troubleshooting.
Check Congestion	Temporarily disconnect streaming devices, large downloads, and gaming consoles. Re-run the speed test.	High concurrent usage often causes perceived slowness.
Test Wired vs. Wi-Fi	Connect a computer **directly** to your router via an **Ethernet cable** and run the speed test.	If the wired speed is good but Wi-Fi is slow, the issue is internal (Wi-Fi channel/router health). If both are slow, the issue is upstream (service/modem/CPE).
CPE/ONT Check	If both wired and wireless are slow, perform a **Full Power Cycle** (unplug everything for 30 seconds, plug back in CPE/ONT first, then router).	Clears cached settings and addresses temporary service glitches.

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When to Escalate 🚨

- If your speed remains **significantly below your subscribed plan** even after testing with a **wired connection** directly to your router or CPE.
- If testing shows that both wired and wireless speeds are slow, indicating a potential issue with the service delivery itself.

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3. Problem: Intermittent Connection / Dropping Wi-Fi 🔌

Your connection is unstable, constantly disconnecting and reconnecting.

Client Steps	Action & Check	Diagnosis
Full Power Cycle	Unplug all network equipment (ONT/CPE and Wi-Fi router) for **60 seconds**. Plug the primary device (ONT/CPE) in first, wait for stabilization, then plug in the router.	Resets all connections and clears potential configuration conflicts.

Check Interference	Ensure your router is away from other electronics (microwaves, cordless phones) and large metal objects that can interfere with Wi-Fi signals.	Interference and overheating are common causes of instability.
Check All Cables	Gently unplug and firmly re-plug **all** power, fiber optic, and Ethernet cables at both ends (modem/CPE and router).	A slightly loose connection is a frequent cause of intermittent drops.
Isolate Device	If only one device is affected, **Restart** that device and **"Forget"** and reconnect to the Wi-Fi network.	Isolates the problem to the device's network card or software.

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When to Escalate 🚨

- If the intermittent connection persists on **all devices** even after a full power cycle and re-seating all cables.
- If the issue seems random and not tied to any specific action, indicating a potential line or equipment fault that requires professional inspection.

General Tips & Important Notes

- **Ventilation:** Always keep your equipment (ONT, CPE, Router) well-ventilated. Overheating is a major cause of performance degradation and intermittent issues.
- **Never Open the ONT/CPE:** The fiber optic cable carries powerful light that can damage your eyes. Leave any internal checks on the fiber equipment to a certified technician.
- **Enterprise/CPE Note:** For Enterprise connections, ensure any equipment provided by the previous service provider is completely disconnected to avoid IP conflicts or routing issues.