

Keeping All Three Link Lights On

Why one telephone light won't stay lit on your Vertex — and the switches that fix it.

The Problem: Energy Efficient Ethernet (EEE)

Your Vertex installs **in line** with your network and quietly watches your phone traffic to capture every incoming call. For it to do that, all **three amber link lights must stay solid** — both telephone (line) lights and the management light.

A growing number of internet gateways, routers, and network switches ship with **Energy Efficient Ethernet (EEE, also called IEEE 802.3az or "Green Ethernet")** — a power-saving feature that drops the connection into a low-power idle between bursts of data. When the device on one side of the Vertex goes idle, that telephone link can no longer hold, its amber light goes dark, and the Vertex stops seeing calls on that side.

How to recognize it: When you power up the Vertex, **both telephone lights flash on, then one drops within a second or two** while the management light stays lit. The hardware is fine — the connection on that side is being idled by EEE.

The Solution

Place a small switch **that does not use EEE** in line on the side whose light keeps dropping — between the Vertex and the gateway or phone switch on that side. A non-EEE switch forces a steady, always-on connection, so the Vertex sees every call. If you manage your own gateway or switch, you may instead **disable "EEE" / "Green Ethernet" / "802.3az"** on the port that feeds the Vertex.

Important — a standard gigabit unmanaged switch will NOT fix this, including the popular **TP-Link TL-SG105**. Those switches have EEE built in with no way to turn it off, so they pass the idle straight through to the Vertex. Use one of the models below instead.

TP-Link Switches That Work

Model	Type	Why it works	Best for
TL-SF1005D ★	5-port 10/100, unmanaged	Has no EEE at all — delivers a steady link straight out of the box. Just plug it in.	Simplest fix; recommended for most installs
TL-SF1008D	8-port 10/100, unmanaged	Same as above, with more ports. No setup required.	Larger phone / POS setups
TL-SG105E	5-port Gigabit, Easy Smart (managed)	Log in and set the Vertex-facing port to 100 Mbps Full Duplex , which turns EEE off on that link.	Sites that need gigabit speed
TL-SG108E	8-port Gigabit, Easy Smart (managed)	Same setting as the TL-SG105E, with more ports.	Gigabit speed plus more ports

Do not use a gigabit *unmanaged* switch such as the **TL-SG105** or **TL-SG108S** — their EEE cannot be disabled.

Confirm It's Fixed

You're done when all three amber lights stay solid — both telephone lights and the management light — not just at power-up. Place a few test calls; each one should register. If a light still drops, swap the cable on that side with a known-good cable, then contact us.