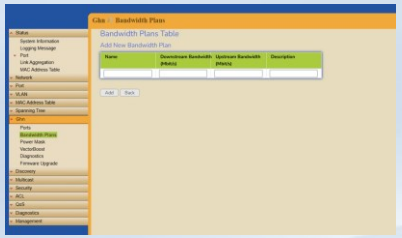
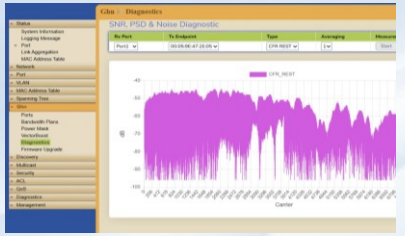
G.hn Solutions

Coax

Twisted Pairs



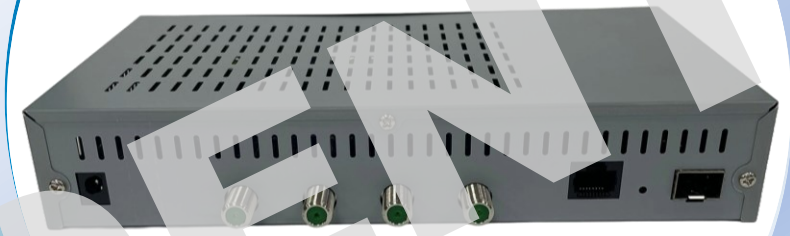


Equipment Management System

G.hn COAX

Solutions Over

G.hn technology offers a fast, sustainable and non-intrusive way of extending internet throughout the premises of an MDU and provide **symmetrical Gigabit** services by making use of existing **coaxial infrastructure** without the need of additional wiring of ethernet cable or fiber running into individual apartments

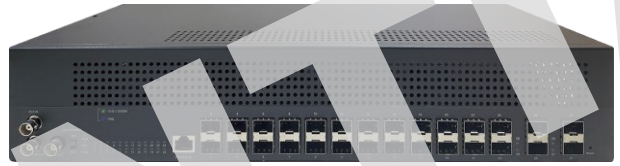


- Cost-effective and faster deployments
- Operates at a low frequency 5~200MHz
- Longer coverage with Link Aggregation

G.hn Twisted Pairs

Solutions Over

G.hn technology offers a fast, sustainable and non-intrusive way of extending internet throughout the premises of an MDU and provide **symmetrical Gigabit** services by making use of existing **twisted pair infrastructure** without the need of additional wiring of ethernet cable or fiber running into individual apartments



- Cost-effective and faster deployments
- Operates at a low frequency 5~200MHz
- Longer coverage with Link Aggregation

G.hn Solution For Coax

- TL-9607Q 4-port microDPU
- TL-9607D 1-port microDPU
- TL-9802 & TL-9825 CPE (w/o Wi-Fi)
- TL-9732C CPE (with Wi-Fi 6)
- L2 Switch 10-port & 24-port
- TL-2000C Coax SFP

G.hn over Coax – 4-port version

Master Unit

Model: TL-9607Q

Uplink: 2.5G Ethernet/SFP

Downlink: 4* 1G Coax

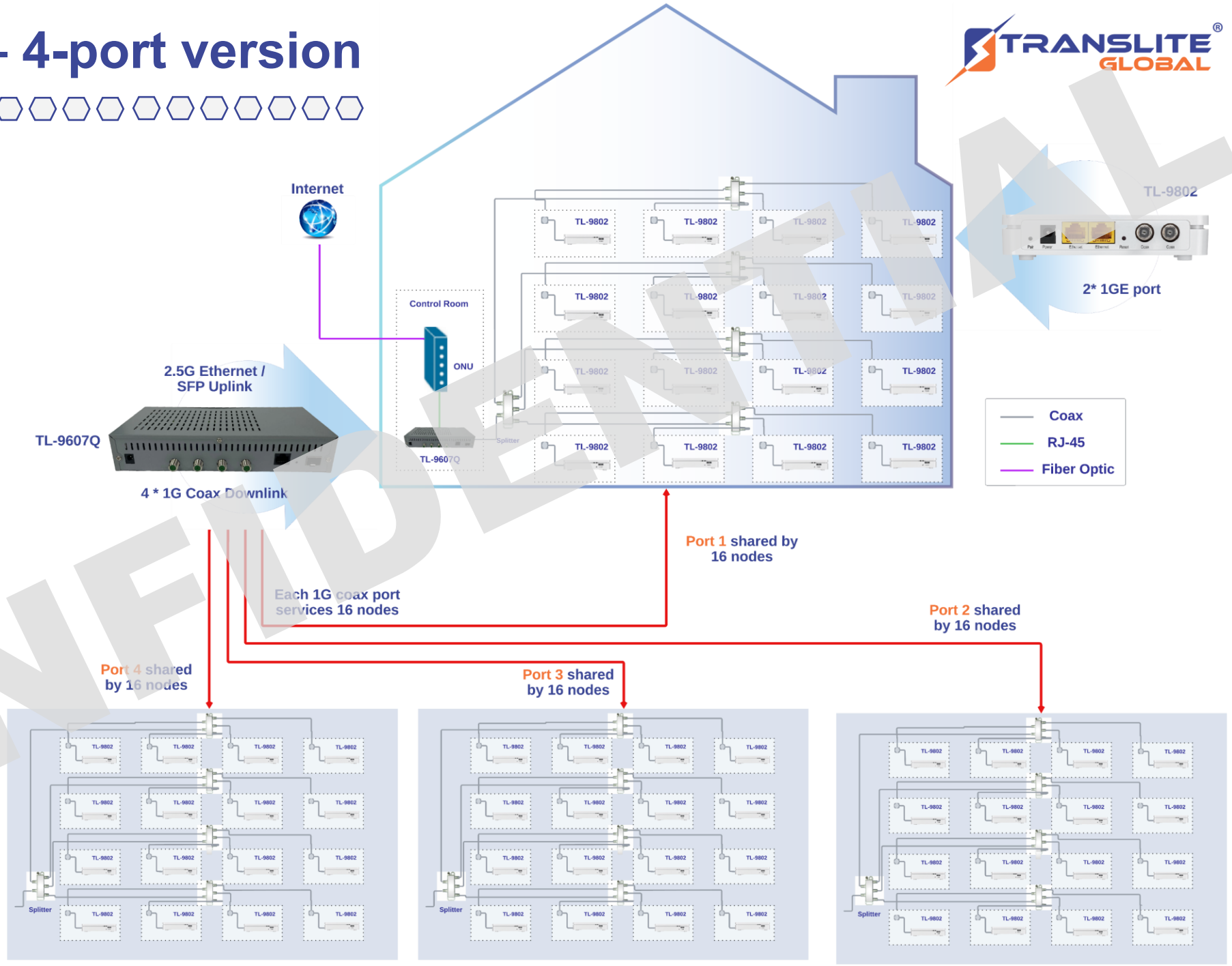
No. of nodes served: 64

CPE / Endpoints

Model: TL-9802

Ports:
2* 1GE ports; TV_{out} Coax

Other CPE options:
TL-9825
TL-9732C



G.hn over Coax – 4-port version

With TV Passthrough Via External Diplexer

Master Unit

Model: TL-9607Q

Uplink: 2.5G Ethernet/SFP

Downlink: 4* 1G Coax

No. of nodes served: 64

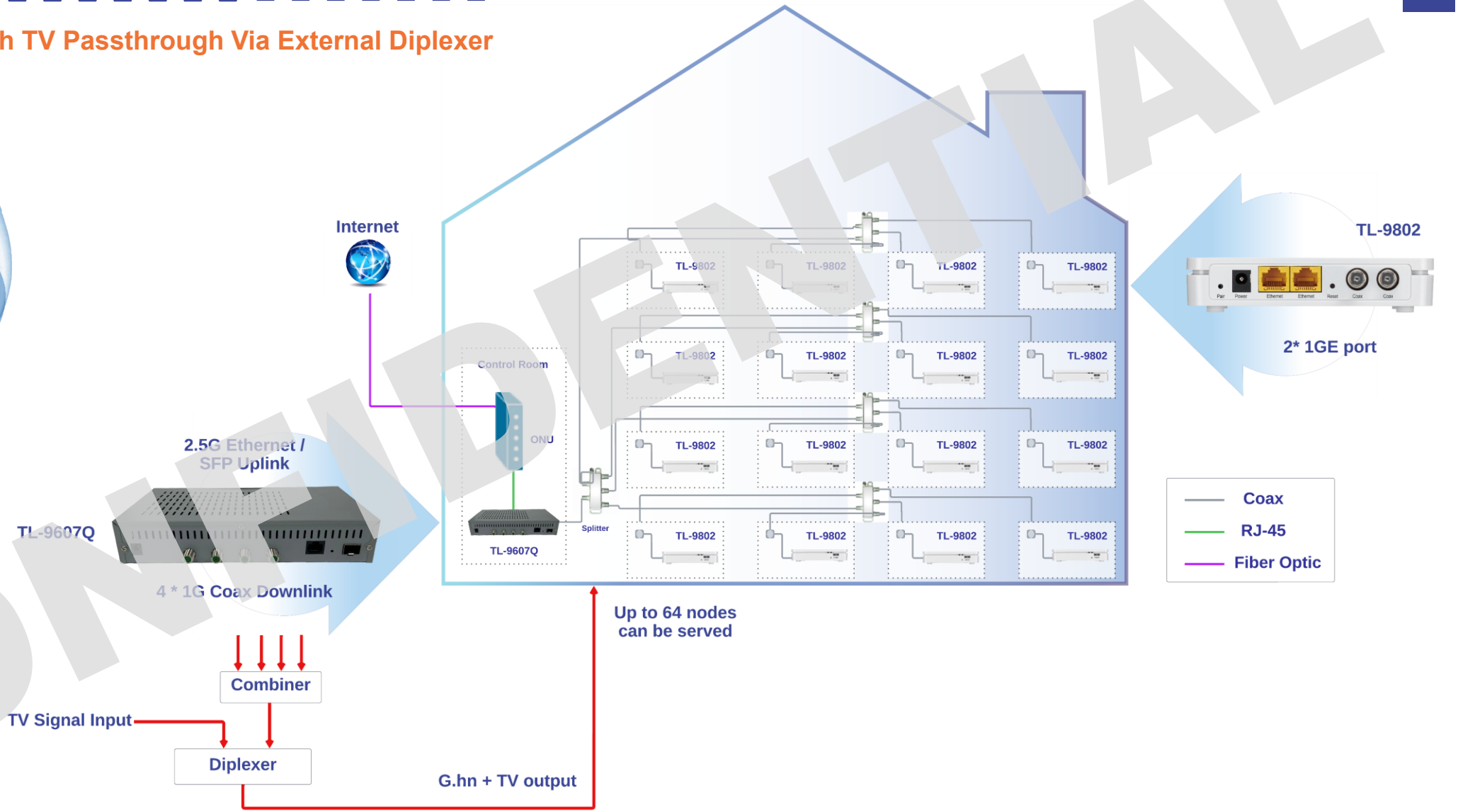
TV Passthrough: Yes (external diplexer)

CPE / Endpoints

Model: TL-9802

Ports:
2* 1GE ports; TV_{out} Coax

Other CPE options:
TL-9825
TL-9732C



G.hn Over Coax – Single Port

Master Unit

Model: TL-9607D

Uplink: 2.5G Ethernet/SFP

Downlink: 1* 2.5G Coax

No. of nodes served: 16

CPE / Endpoints

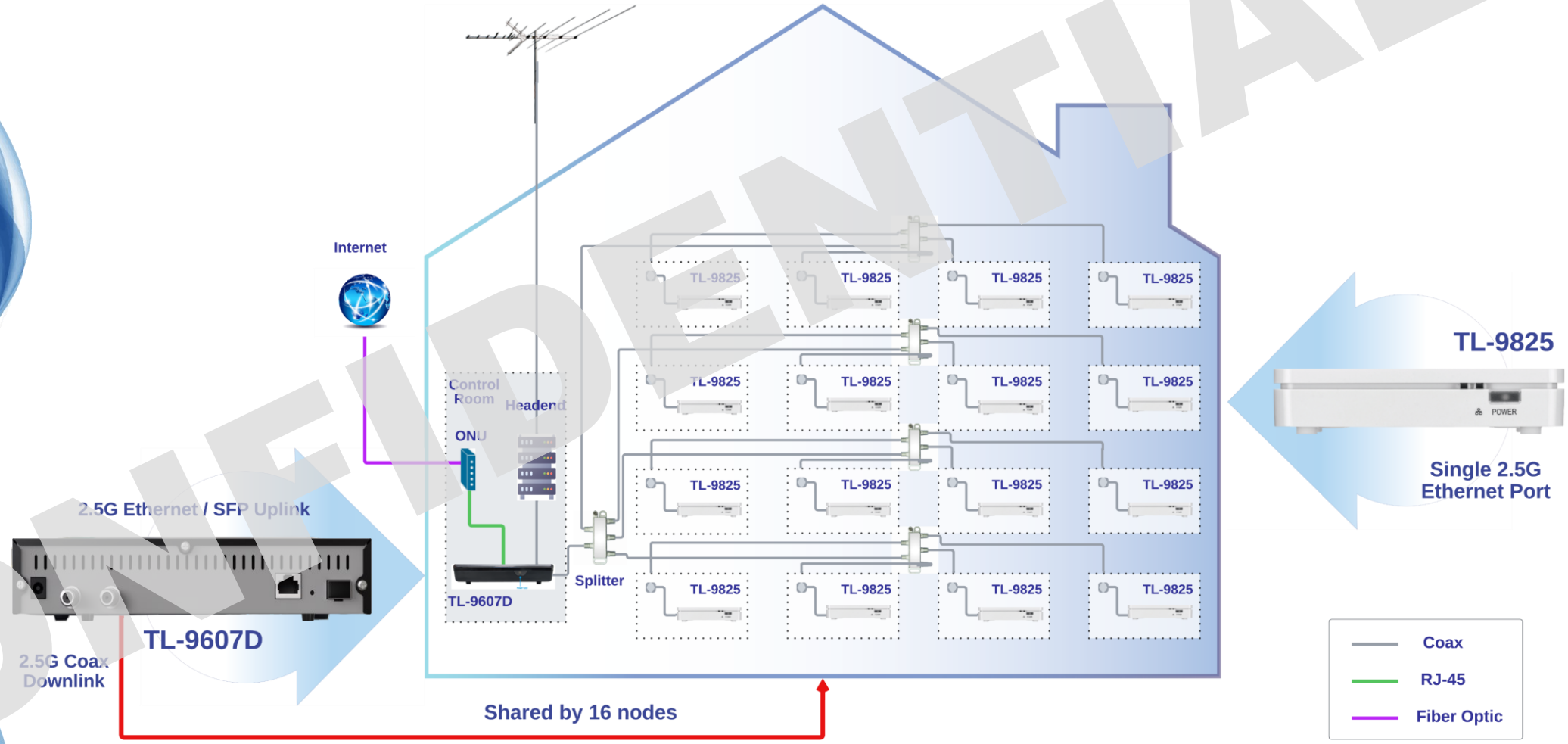
Model: TL-9825

Ports:

1* 2.5GE port; TV_{out} Coax

Other CPE options:

TL-9732C
TL-9802



G.hn Over Coax – L2 Switch 10-Port

L2 Switch

Model: TL-1012

Uplink: 2* 10G SFP

Downlink: 10* 2.5G Coax

No. of nodes served: 160

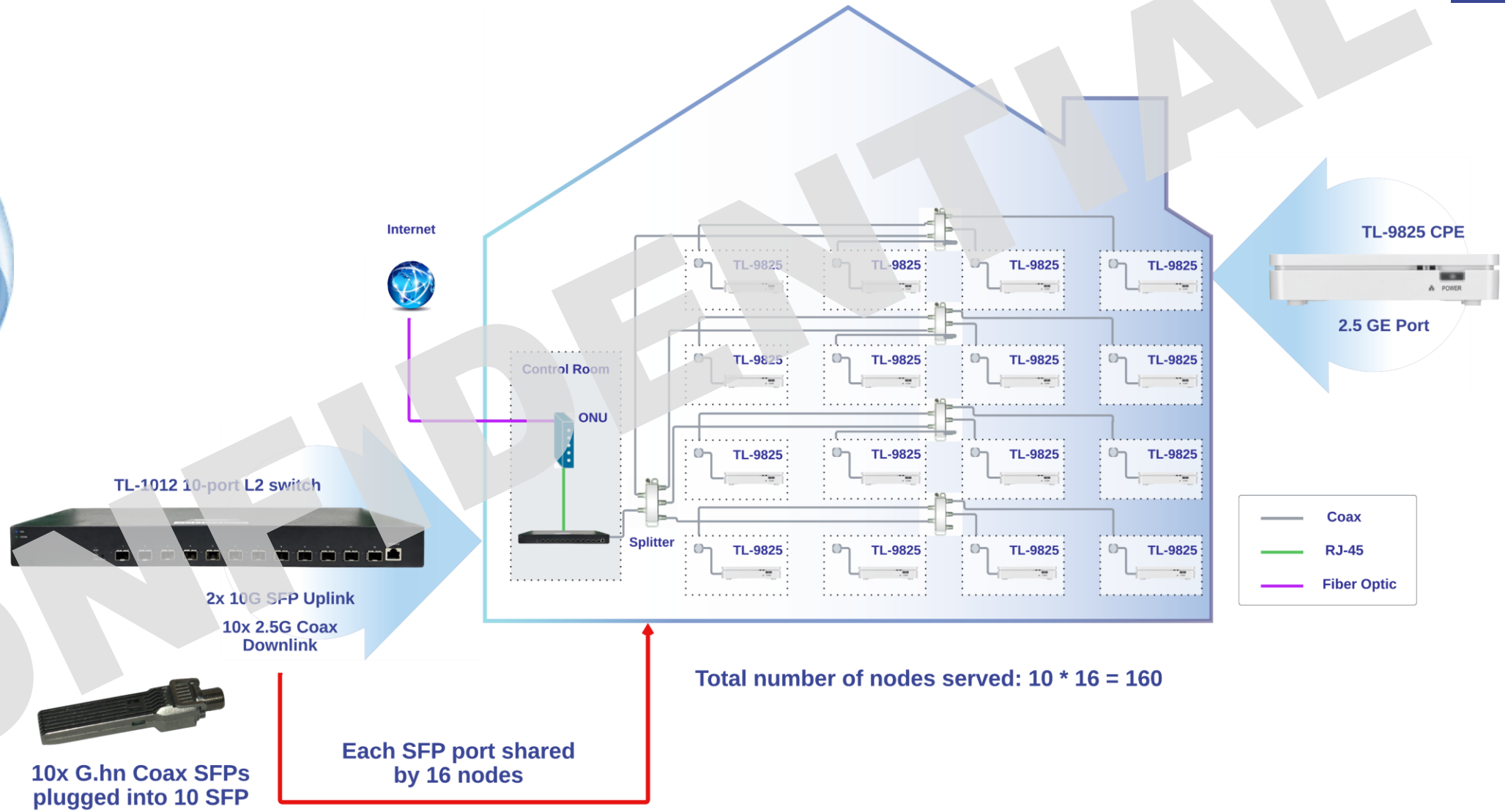
CPE & SFP

CPE Model: TL-9825

Ports:
1* 2.5GE port; TV_{out} Coax

Other CPE options:
TL-9732C
TL-9802

SFP Model: TL-2000C



G.hn Over Coax – L2 Switch 24-Port

L2 Switch

Model: TL-1024

Uplink: 4* 10G SFP

Downlink: 24* 1G Coax

No. of nodes served: 384

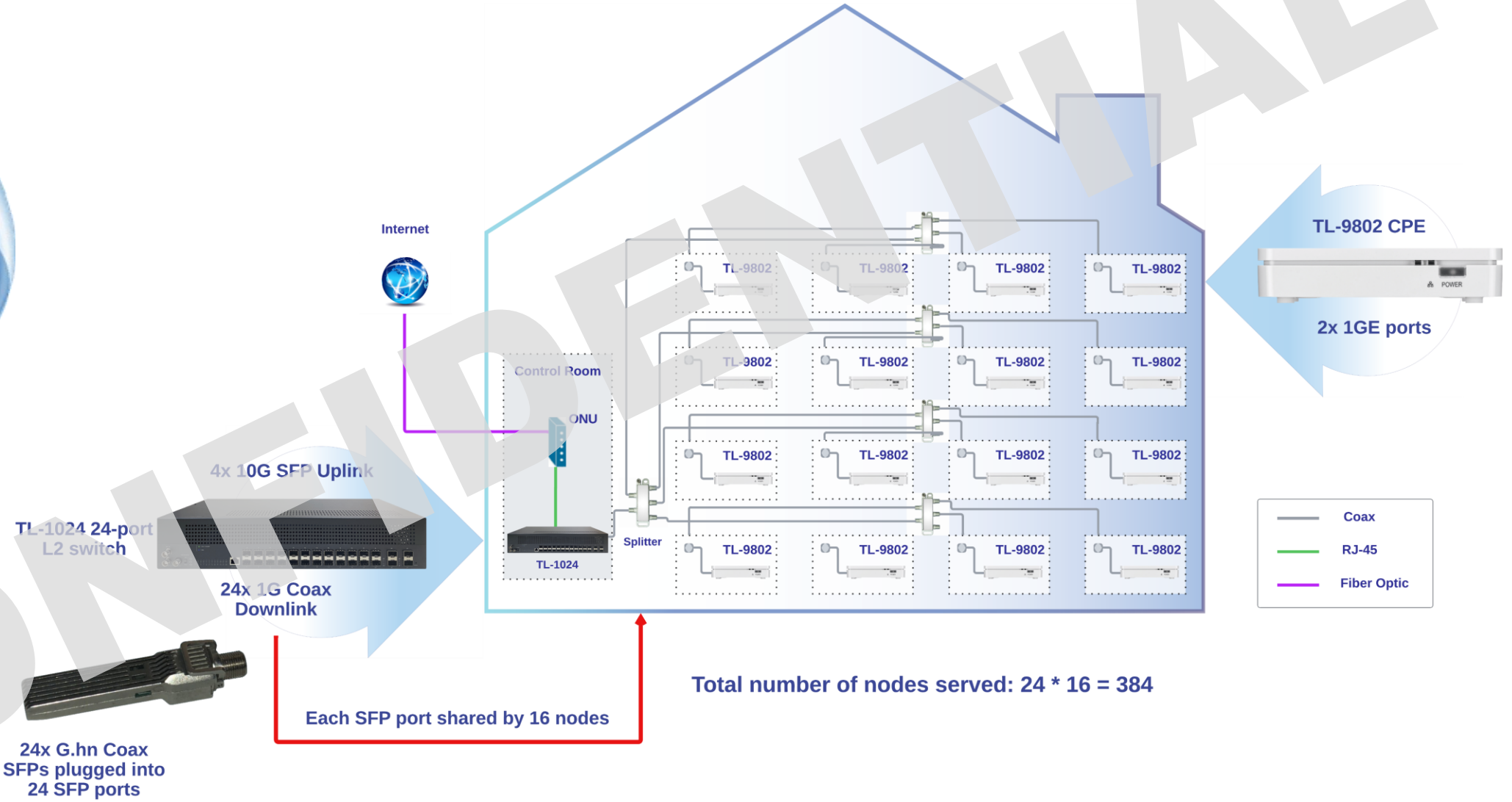
CPE & SFP

CPE Model: TL-9802

Ports:
2* 1 GE port; TV_{out} Coax

Other CPE options:
TL-9825
TL-9732C

SFP Model: TL-2000C



G.hn Solutions For Twisted Pairs

- TL-9902 CPE with 1 GE port
- TL-9732T CPE with Wi-Fi 6
- L2 Switch 10-port & 24-port
- TL-3000C G.hn Wave-2 MIMO SFP
- TL-4000C G.hn Wave-2 SISO SFP

G.hn over Twisted Pairs – L2 Switch 10-Port

L2 Switch

Model: TL-1012

Uplink: 2* 10G SFP

Downlink: 10* 2.5G Twisted pair

No. of nodes served: 10

CPE & SFP

Model: TL-9902

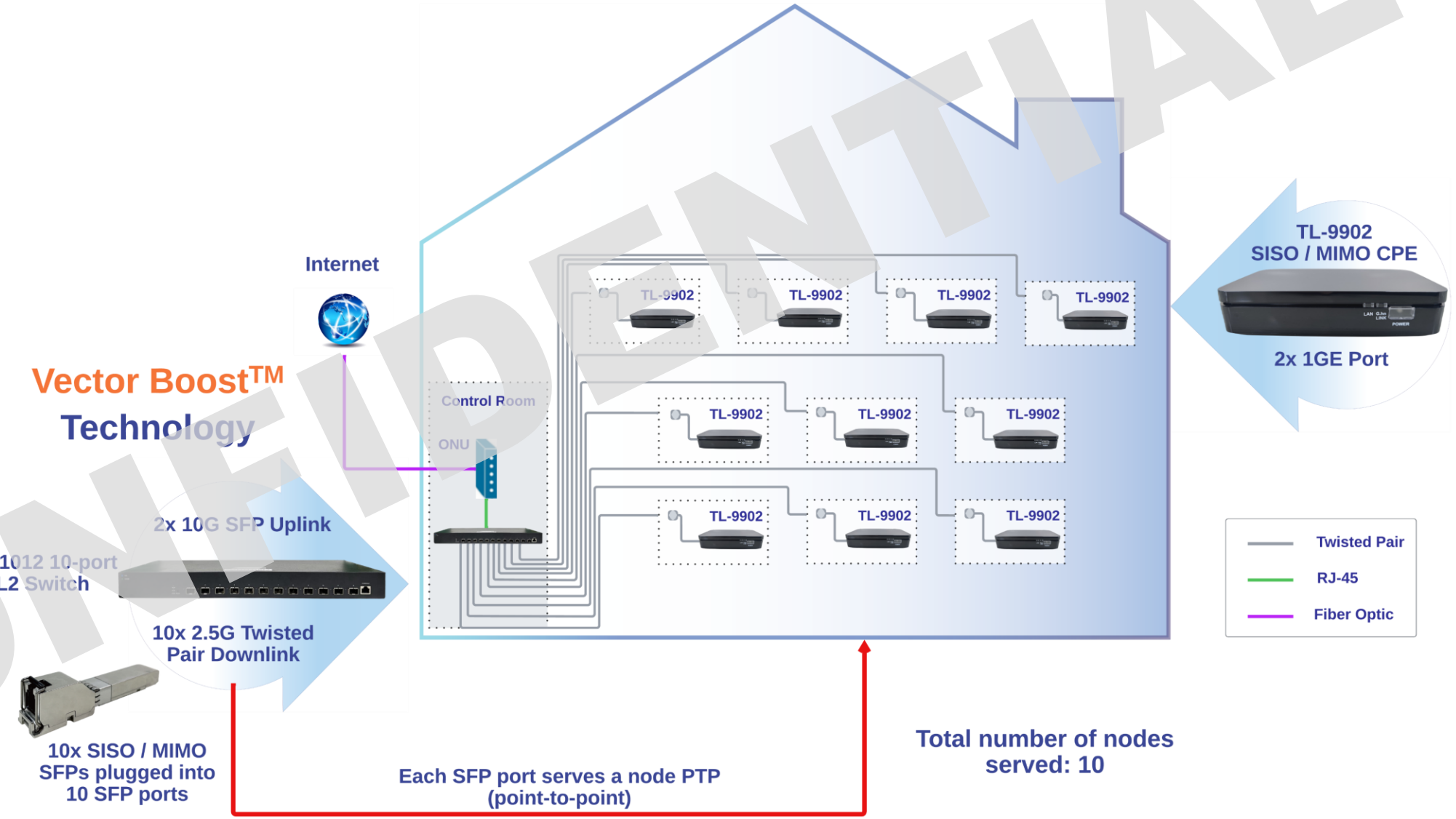
Ports: 2* 1GE port

CPE options: TL-9732T

SFP Model:

TL-4000C SISO SFP

TL-3000C MIMO SFP



G.hn over Twisted Pairs – L2 Switch 24-Port

L2 Switch

Model: TL-1024

Uplink: 4* 10G SFP

Downlink: 24* 1G Twisted pair

No. of nodes served: 24

CPE & SFP

Model: TL-9902

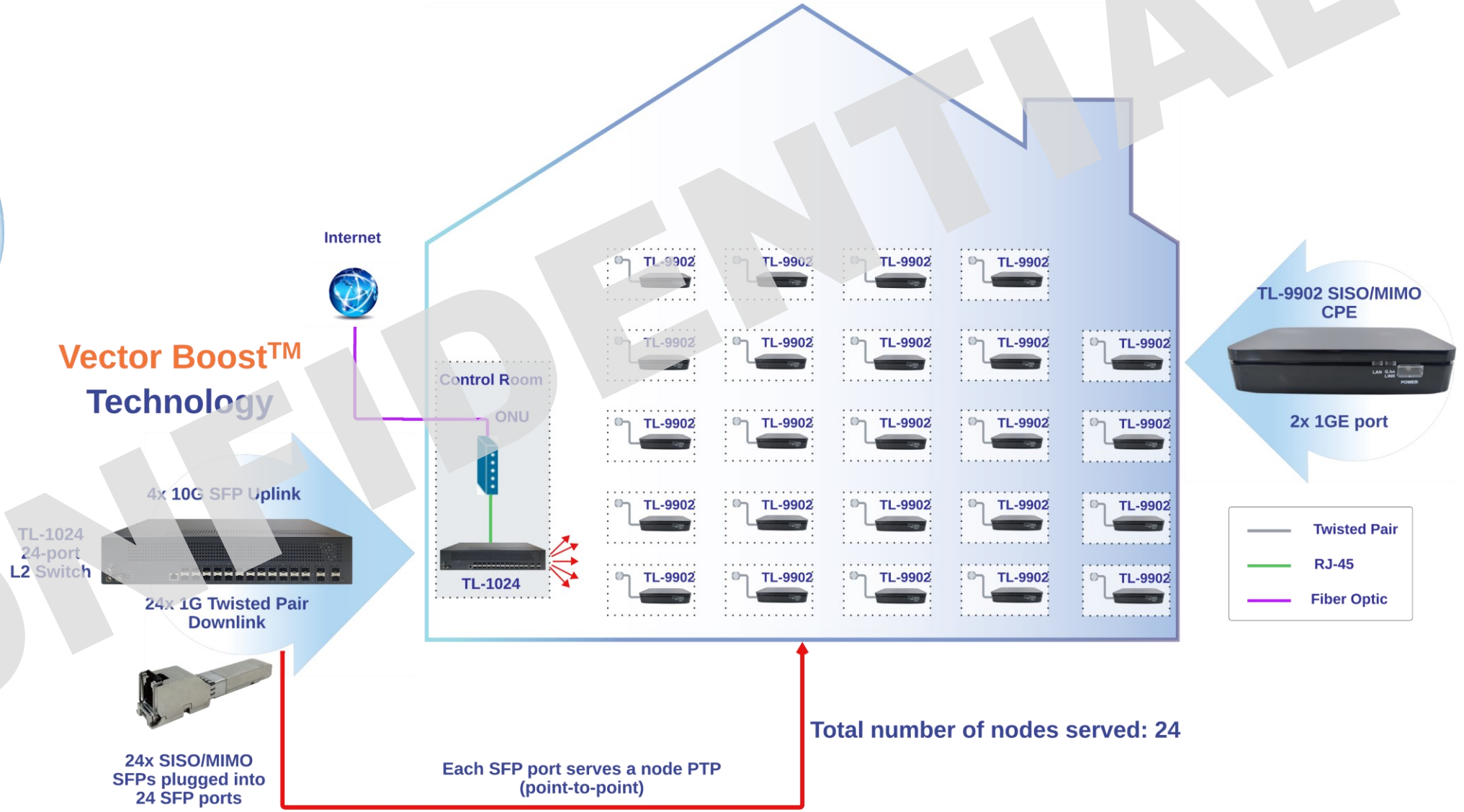
Ports: 2* 1GE port

CPE options: TL-9732T

SFP Model:

TL-4000C SISO SFP

TL-3000C MIMO SFP



Performance & Test Results

Throughput between 24-port L2 Switch and G.hn Bridge with SISO SFP

- 24 pairs linked; only one pair has traffic performance information
- Packet size: 1518 bytes
- Generate 1Gbps traffic each direction

Throughput rate bi-direction (DS/US) (Mbps)	Download speed only (Mbps)	Upload speed only (Mbps)
592/585	939	920

Throughput between 24-port L2 Switch and G.hn Bridge with SISO SFP

- 6 pairs linked; only one pair has traffic performance information
- Packet size: 1518 bytes
- Generate 1Gbps traffic each direction

Throughput rate bi-direction (DS/US) (Mbps)	Download speed only (Mbps)	Upload speed only (Mbps)
615/594	998	955

MicroDPU Throughput (Coax)

G.hn Wi-Fi AP	G.hn Bridge
Models Tested	Models Tested
TL-9732C	TL-9802, TL-9825

MicroDPU			
Throughput	**Throughput Rate bi-direction (DS/US) (Mbps)**	**Download speed only (Mbps)**	**Upload speed only (Mbps)**
G.hn Wi-Fi AP	830/832	998	998
G.hn Bridge	836/827	998	998

Performance & Test Results

Throughput between 24-port L2 Switch and G.hn Bridge with SISO SFP

- Packet size: 1518 bytes
- Generate 1Gbps traffic each direction

Distance	PHY Tx (Mbps)	PHY Rx (Mbps)	Bi-direction Tx (Mbps)	Bi-direction Rx (Mbps)	One-way Tx (Mbps)	One-way Rx (Mbps)
100m	1691	1691	721	711	998	998
200m	1309	1286	559	550	998	998
300m	702	712	302	300	593	595
400m	446	427	190	182	377	360
500m	DSL Line may disconnect					
600m						

MicroDPU Throughput (Coax)

G.hn Wi-Fi AP	G.hn Bridge
Models Tested	Models Tested
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MicroDPU			
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