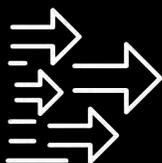


# GigaLine 900

Ultra light fiber-copper-coax multiplexer for instant gigabit connectivity in Multi-Tenant Buildings (MTU/MDU)



Extending Fiber  
Over Existing Wiring



Ultra Fast ROI



Ultra Green  
95% Less Power



Gigabit Services

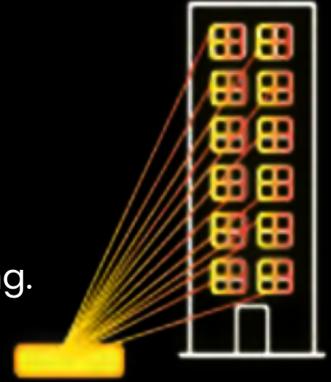
**GigaLine 900 instantly  
turns MDUs passed into  
MDUs connected.**



# Solving the MDU Connectivity Challenge

The deployment of high speed broadband has been extremely challenging for older MDU/MTUs due to the high cost and time required to implement fiber throughout an existing building.

All of these dwellings have telephone lines (i.e. twisted pairs) and often coax already traversing the walls and floors, reaching to each of the units. Actelis takes advantage of this existing infrastructure to deliver fiber-grade connectivity throughout the building.



## Connectivity Today

Bring instant Gigabit connectivity throughout the building!

The solution is simple to install and easy to integrate with any FTTH network, bringing new and upgraded services to your customers.

## Seamless PON Extension

Deliver fully dynamic Gigabit services ubiquitously to all MDU residents, over the building's existing twisted pair phone or coax wiring.

## Quick ROI with Low Entry Cost

Offering a flexible platform that cost effectiveness serves even the smallest MDUs, GigaLine 900 is a low cost solution with a Return On Investment typically lower than six months.

## Ultra Low Power Consumption

Consuming 95% less power than competitive MDU solutions, GigaLine 900 significantly reduces the carrier cost for local power and minimizes the impact of reverse power on customer extracted electricity.

# A High Quality Experience For Your Customers



GigaLine900 ensures residents **High Quality of Experience (QoE)**, by enabling Gigabit services to be dynamically allocated to up to 16 customers per GL900. The Downstream and Upstream ratio is automatically responsive for each customer.

## Key GigaLine900 Features

- Utilizes existing copper or coax infrastructure
- Fast ROI for any size MDU. Low entry cost.
- Compact design
- Local and reverse power
- Easy and quick installation with automatic configuration
- Weather hardened (indoor or outdoor\* installation)
- Cyber-hardened 128-bit encryption
- Secure, managed solution with remote provisioning

\* Future Release

This is a pre-release document. All information is subject to change without notice.

# Summary of Specifications

The GigaLine 900 Native PON extender product line includes two main units – A G.hn Point-To-Multi-Point (PTMP) Multiplexer and a G.hn CPE. Multiple variants are supported per Multiplexer and CPE.

GL900x Multiplexer	
<b>Technology</b>	G.HN WAVE 2 Master over TP or Coax ITU-T G.9960, G.9961, G.9962, G.9964 G.hn 200MHz - Optional co-existing with POTS /DSL over twisted pairs and with analog cable TV (250MHz to 1200MHz) over coax
<b>Topology</b>	Point-To-Multi-Point
<b>Network-Network Interface (NNI)</b>	1x 2.5/1 Gbps SFP port – GPON ONU/ONT, Active Ethernet, 1000Base-T SFP, or 1 Gbps (RJ-45, Ethernet)
<b>Subscribers Bandwidth</b>	Up to 1.7 Gbps US/DS, shared between up to 16 customers. Optimize throughput per subscriber enabling full dynamic allocation of US and DS bandwidth with no fixed US/DS ratio.
<b>Performance/Coverage</b>	1 Gbps @ 300ft /100m ; 1 Gbps @ 500ft/150m - extended reach*
<b>MDU interfaces – Type</b>	8 / 16 ports , RJ-45 – G.hn over Twisted Pairs 2 ports, F-connector – G.hn over Coax, CATV Input/Output coax
<b>Number of subs/ MDU</b>	Twisted Pairs: 8 (GL908), 16 (GL916), Nx16 (Multiple units per MDU) Coax: 1 coax port to serve up to 16 customers (GL908/916)
<b>Enhanced Security</b>	End-to-end 128-bit AES encryption, Individual keys per sub /CPE
<b>Switching/L2</b>	MAC – 1K entries, 4K VLAN including support for tagging and management VLAN. IGMP or MLD snooping, DHCP
<b>Management</b>	Auto provisioning, Remote Management
<b>Environmental</b>	Temp: -10°-50°/14°- 122° C/F, Extended * -40°-65°/149° C/F Humidity 10-90% non-condensing
<b>Power</b>	5W, Air cooling. Local or (optional) Reverse power from CPE side
<b>Size</b>	Dimensions (Inch/mm): H: 1.6/40, D: 11.0/280, W: 8.4/213

GL90x Managed CPE	
<b>Technology</b>	G.HN WAVE 2 over TP or Coax, ITU-T G.9960 & G.9961 compliant. G.hn 200MHz
<b>G.hn</b>	RJ-45 for G.hn Twisted Pair or Coax
<b>Customer interface</b>	1x 1 Gbps (RJ-45, Ethernet)
<b>Dimensions</b>	1.5" H x 2.76" W x 5.24" D (Non-WiFi)
<b>Power</b>	Local, Support Reverse powering (optional) Input: AC 100-240V, Output: DC 12V /1A
<b>Installations</b>	Table / desk mount / wall mounted
<b>WLAN (WiFi)</b>	802.11 b/g/n; 802.11 a/n/ac, Concurrent 2.4GHz & 5GHz

\* Future Release

## GL900x Product Line

*over Hybrid Twisted Pair wiring and Coaxial cable*

### Multiplexer

**GL908** – An 8-port PON Extender

**GL916** – A 16-port PON Extender

**GL908-TA** – An 8-port PON Extender. Extended Temp.

**GL916-TA** – A 16-port PON Extender. Extended Temp.

**GL900-OE** – IP67 Outdoor Enclosure



### Managed CPEs

**GL91** – G.hn Ethernet Bridge (converter)

**GL91-W** – G.hn Ethernet Bridge with WiFi

**GL91-P** – G.hn Ethernet Bridge, PoE for GL900 Reverse Powering



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