

# Tilgin HG1500 Family

## Fiber Home Gateways



Designed for point-to-point FTTH networks, Tilgin's HG1500 Family of fiber Home Gateways deliver the wirespeed routing, gigabit and advanced functionality needed for new services and applications at Home

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Tilgin's HG1500 is designed as an intelligent service node, enabling you to deliver additional real time applications into the home. Wire speed routing capabilities are the key enablers for next generation service platforms provided by HG1500. Tilgin powerful HG1500 Family, including the HG1550 and HG1520 Home Gateway series helps you to deliver new revenue generating services from day one, all while maintaining a low operating cost. These platforms will continue to deliver new functionality for years to come.

The multi-port functionality of the HG1550 helps extend the connectivity of the online Home or Office, distributing managed Ethernet ports throughout the Home or Small office. Add to that the improved capacity and speed of 802.11n WLAN plus remotely managed multiple SSIDs and this allows you to offer new services, all while reducing operational costs, taking full advantage of our Home Gateway and Remote Management Solution.

Our dual WAN solution available on the HG1550 products gives you the flexibility to offer a single hardware model for both Ethernet and fiber access generating additional CAPEX savings. The HG1550 offers a Gigabit Ethernet up-link as well as a slot for an SFP module, either 100Mbps or Gigabit depending on model.

The HG1520 is our optimized fiber based Home Gateway product offering full wire speed routing and is designed for Next Generation Networks, that requires capabilities for converged services within the Home.

Tilgin's HG1500 platform is powered by a dedicated CPU which achieves the highest possible voice quality available on the market today. Tilgin's HGA Voice solution supports a fully matured PSTN replacement strategy along with the possibility to migrate to a standard IMS.

### Tilgin Home Gateway Application Software

Tilgin's HGA Software is the engine that delivers all Service Enablers and Remote Management functionality independent of the access technology and hardware configuration used. All HGA Software Drivers form a modular building system for you, as an operator, to combine in order to maximize your service offerings and revenue potential.

### HGA Full Service Routing

Tilgin's HGA Full Service Routing Driver expands your IPTV service capabilities and provide additional operational savings through Any-Port-Any-Service function. Full Service Routing will reduce or eliminate start-up support calls when new or additional STB's are to be deployed within the Home.

### TR-069 Remote Management

Beginning with zero-touch auto configuration, you can conveniently define and manage all services and network settings from your support center. Managing devices from a central location keep you in control, reduces your costs, and eliminates the provisioning hassles that can impede your business. Tilgin's long term involvement with the Broadband Forum provides you with the necessary resources to help your business operate using TR-069 based ACS and CPE solutions.

### Fail Safe Provisioning

Tilgin's provisioning solution protects the device boot-up and software download session in case of a power interruption during the download session. This feature assures that the Home Gateway will be able to reconnect to the ACS once connectivity is restored. A Tilgin Home Gateway powered by Tilgin's HGA Software assures you that the device will not become a "brick".



# Tilgin HG1500 Home Gateways

Tilgin Application Software is common to all Tilgin hardware delivery platforms.

Application Software is easily upgraded from standard to premium features by normal auto-provisioning.



## HG1500 Model Configurations

Model	WAN			VoIP VoIP		LAN and Home networking				
	Fiber Ethernet	Fiber Connector	Copper Ethernet	PSTN ports	Ethernet ports	USB ports	Routing	Switching	WLAN	
									SSIDs	WPS
HG1558	SFP**	LC Simplex	1000 Base Tx	2 FXS	7	2.0 Host	Wire speed*	Wire speed	-	-
HG1551	SFP**	LC Simplex	1000 Base Tx	2 FXS	7	2.0 Host	Wire speed*	Wire speed	4	Yes
HG1551	SFP**	LC Duplex	1000 Base Tx	2 FXS	7	2.0 Host	Wire speed	Wire speed	4	Yes
HG1524	100Base LX10	LC, Duplex	-	2 FXS	4	2.0 Hos	Wire speed	Wire speed	4	Yes
HG1523	100Base FX10	LC, Duplex	-	2 FXS	4	2.0 Hos	Wire speed	Wire speed	4	Yes
HG1522	100Base BX10	SC, Simplex	-	2 FXS	4	2.0 Host	Wire speed	Wire speed	4	Yes
HG1522	100Base BX10	SC, Simplex	-	2 FXS	4	2.0 Host	Wire speed	Wire speed	4	Yes

\* LAN - LAN

\*\* Available SFPs: 1000BaseBX10, 1000BaseLX10, 100BaseBX10 and 100BaseLX10

WAN interfaces	WLAN interfaces	Regular Compliances
Fiber Ethernet WAN <ul style="list-style-type: none"> <li>Wave lengths Simplex, Tx/Rx: 1310nm / 1550nm</li> <li>Wave lengths Duplex, Tx/Rx: 1310nm / 1310nm</li> <li>Reach single mode: 15km</li> <li>Reach multi mode (HG1523): 2km</li> </ul> Copper Ethernet WAN (HG1550) <ul style="list-style-type: none"> <li>10/100/1000 Base-Tx</li> <li>Autoneg, Auto MDI/MDI-X</li> <li>Connector: RJ-45</li> </ul>	<ul style="list-style-type: none"> <li>IEEE 802.11e/WMM, QoS for voice and video over WLAN</li> <li>WEP, WPA, WPA2</li> <li>Two WPS Solutions, Wireless Protected Setup, with PIN and Push Button</li> </ul> HG1550: <ul style="list-style-type: none"> <li>IEEE 802.11n, 2.4GHz, Draft 2.0, 300Mbps, duplex</li> <li>MIMO antenna Solution</li> <li>One internal antenna</li> <li>One External antenna, can be extended and put outside cabinet</li> <li>Performance optimized use of internal/external antennas</li> <li>Automatic channel bandwidth selection</li> </ul> HG1520: <ul style="list-style-type: none"> <li>IEEE 802.11bg, Super G, 108Mbps</li> <li>Diversity antenna Solution</li> </ul>	<ul style="list-style-type: none"> <li>CE mark</li> <li>FCC Part 15</li> <li>CSA International</li> <li>WEEE</li> <li>RoHS</li> </ul>
LAN interfaces		Physical Specs
<ul style="list-style-type: none"> <li>10/100 Base-Tx</li> <li>Autoneg, Auto MDI/MDI-X</li> <li>Connector: RJ-45</li> </ul>		<ul style="list-style-type: none"> <li>Dimension 282x174x36</li> <li>Weight: 0.65 Kg</li> <li>Operating temperature: 0-40C/ 32-104F</li> <li>Non-operating temperature: -20-60C/ -4-140F</li> <li>Operating humidity, RH, non-condensing: 10-90%</li> <li>Non-operating humidity, RH, non-condensing: 5-95%</li> <li>HG1550: In: 100-240VAC, Out: 12VDC/2A</li> <li>HG1520: In: 100-240VAC, Out: 12VDC/1.25A</li> </ul>
Voice interfaces		
<ul style="list-style-type: none"> <li>Ring voltage: min 45vrms</li> <li>REN, Ring Equivalency Number per FXS: 5</li> <li>Connector: RJ-11</li> <li>Dedicated CPU for VoIP making Voice Application independent of any data load.</li> </ul>		

### Full matrix of Tilgin hardware and HGA Software compliance.

	HGA540	HGA550	HGA560	HGA570	HGA Storage	HGA Remote Access
Vood 300	Y	Y	-	-	-	-
HG321	Y	Y	Y	Y	-	Y
HG1100	Y	Y	Y	Y	-	Y
HG1210	Y	Y	Y	Y	Y	Y
HG1310	Y	Y	Y	Y	Y	Y
HG1350	Y	Y	Y	Y	Y	Y
HG1520	Y	Y	Y	Y	Y	Y
HG1550	Y	Y	Y	Y	Y	Y