

Tilgin HG2700

Multi Access Home Gateways

The family of products in the HG2700 series offers a high end Gateway with capacity for future services. The product family has a powerful Wi-Fi solution and is IoT capable. It is equipped with an Ethernet WAN interface and supports additional access technologies via SFP



HG 2700 highlights

- **Multiple WAN interfaces**
 - Support up to 2 Gbps downlink throughput
 - Gigabit Ethernet WAN interfaces
 - SFP cage for flexible WAN access support
- **Latest Wi-Fi standard support**
 - 802.11ac, wave 2, MU-MIMO @ 5 GHz
 - Accumulated link speed of 2300 Mbps
 - Full offload of all Wi-Fi routing
 - Solution optimized for many clients
 - Support for Wi-Fi mesh extenders
- **Advanced QoS engine**
 - Layer 7 deep packet inspection
 - Prioritization per client application
- **High level of security**
 - Secure boot with signed SW option
 - HW supported sandbox environment
 - HW support for encrypted services
- **Smart Home and cordless voice services**
 - Support for DECT / CAT-iq
 - ULE for smart home and IoT
- **Seliro Ensemble SDK**
 - Supported with ULE and Wi-Fi
 - HW virtualization for 3rd party software
- **Ensemble gateway software from Seliro**
 - Support the full feature set
 - Support the software development kit

Tilgin's HG2700 product family is based on a platform with a highly distributed hardware architecture. The solution has dedicated HW for full off-loading of wired as well as wireless routing, an entity for QoS, a security engine for acceleration of encrypted traffic services such as IPSec, SIP/TLS and SRTP.

The solution has a dual core architecture hosting the application software with the possibility to run specific software in a sandbox environment, thus preventing for instance an IoT application from interfering with or affecting other services in the gateway.

The product family is truly a platform that has full focus on Wi-Fi, with its concurrent dual band solution, offering an accumulated Wi-Fi link speed of up to 2300 Mbps.

The 5 GHz radio supports the wave 2 generation of 802.11ac including support for MU-MIMO, band steering, roaming and more.

The 2.4 GHz radio is a state of the art 802.11n compliant radio that supports "any client" beamforming that gives improved coverage in the home for all type of devices.

Since the whole Wi-Fi solution has full hardware off-loading, the maximum throughput goes beyond all limits without involving the host processor and the applications running there. Actual Wi-Fi speeds beyond 1000 Mbps are supported, where only the connected clients and wired interfaces are limiting factors.

The wired routing capacity goes beyond what is seen on most home gateways today, with the capacity to provide full gigabit bidirectional routing also for the smallest Ethernet packets. By utilizing both WAN interfaces, or when using GPON as access technology, download speeds of up to 2 Gbps is possible.

The product family is prepared for and can act as a Wi-Fi mesh extender controller in a Wi-Fi mesh network to control and manage one or more Wi-Fi mesh extenders in a home, for superior Wi-Fi coverage also in the most difficult environments. The hardware support advanced features such as ability to seamlessly move connected clients between the gateway and the Wi-Fi extenders in the home.

The HG2700 has an option for DECT/CAT-iq, allowing high definition voice and bring speech quality to a new level. It opens a seamless path to IoT services with the support for ULE – the CAT-iq evolution into the IoT and specifically the smart home segment.

Tilgin HG2700 Home Gateways

The HG2700 product family, takes the home gateways to the next level in the evolution of operator managed home gateways. The platform turns the gateway into a true service platform that can grow with new service offerings for many years to come.



The picture show the interfaces of the HG2701/HG2704

HG2700 Model Configurations

Model	Memory		WAN		VoIP		LAN and Home Networking						
	Flash	RAM	Copper Ethernet ports	SFP cage	PSTN	CAT-iq	ULE	Ethernet ports	USB 3.0/2.0 Ports	WLAN			
										SSID	WPS	2.4 GHz 802.11n	5 GHz 802.11ac
HG2701	128 ⁽¹⁾	256 ⁽¹⁾	1 x GE	1	2 x FXS	No	4 x GE	1/1	4+4	Yes	MIMO 3x3 3 streams	MIMO 4x4 4 streams	
HG2702					No								
HG2704					2 x FXS	Yes							
HG2705					No								

All products support 2000 Mbps accumulated routing for all packet sizes utilized with the built-in router engine.
 All products support Line rate switching on all interfaces simultaneously.
 (1) Memory size is in Mbytes

WAN interfaces	WLAN interfaces	Regulatory Compliances
10/100/1000 Base-Tx, Autoneg, Auto MDI/MDI-X Connector: RJ-45 SFP cage	IEEE 802.11n, 2.4GHz MIMO 3x3, three spatial streams 600 Mbps link speed with 256 QAM 4 SSID	CE mark WEEE RoHS
LAN interfaces	Implicit beamforming HW ready for MU-MIMO Support for 802.11b,g,n,d,e,h,i,w,k,v,r,ai	Physical Specifications Dimension: 200 x 100 x 100 mm Weight: 0.6 kg Operating conditions: • Temperature: 0 to 40 C / 32 to 104 F • Humidity, RH, non-condensing: 10 to 90% Non-operating conditions • Temperature: -20 to 60C / -4 to 140F • Humidity: RH, non-condensing: 5 to 95% External Power Supply: In: 100-240VAC, Out: 12VDC, 2.5 A
Voice interfaces	IEEE 802.11i/ WEP, WPA, WPA2 per SSID IEEE 802.11e/WMM, QoS for voice and video over WLAN Wireless Protected Setup (WPS) with PIN and Push Button Automatic channel bandwidth and optimum channel selection Internal antennas	
Smart Home – IoT	Switch 2048 MAC address table entries Full 4K width VLAN support, 64 simultaneous VLAN 32 L2/L3 QoS queues, programmable flow classification Stacked VLAN support, Ingress port and flow based policing Support for jumbo frames	
USB	Programmable QoS engine for layer 2 to 7 classification and tagging Programmable support for traffic monitoring	
Green mode		
Standby button for low power mode Designed for CoC compliance		

Tilgin HG2700 is powered by Seliro Device Software Platform



Seliro Device Software Platform is common for and integrated to all Tilgin devices. The device software can be easily upgraded from standard to premium features by normal auto-provisioning. For further details about Seliro Device Software go to www.seliro.com

Full matrix of Tilgin hardware and Seliro Ensemble Software components compliance

	Gateway software	Wi-Fi mesh extender	Smart Home and IoT	Software development kit Third party integration
HG2701	√	√	Via USB device	√
HG2702	√	√	Via USB device	√
HG2704	√	√	Native via ULE	√
HG2705	√	√	Native via ULE	√

