

# Tilgin HG2280

## Multi Access Home Gateways

This family of products in the HG2280 series is equipped with a 802.11ac WLAN interface, thus offering superior WLAN connectivity in the home, in addition to gigabit routing and all other services offered with HGA software.



### HG 2280 highlights

- **Latest Wi-Fi standard support**
  - 802.11ac
- **Any client beamforming**
  - Implicit 2.4GHz
- **Direct link technology**
  - Maximize Wi-Fi throughput
  - Idle CPU
- **New generation DECT**
  - Support for DECT / CAT-iq
  - ULE support for smart home
- **Latest VDSL2 technology**
  - Full VDSL2 vectoring
  - All profiles including 30a
- **HGA gateway software**
  - Support for all HGA services
  - Full TR-069 support
  - Fail safe provisioning
  - Operator log
- **Industry design**
  - Designed to blend into Home decor
  - Easy to brand for an operator

Tilgin's HG2280 embraces the very latest WLAN technology 802.11ac using a three stream WLAN radio. The implementation uses 802.11ac technology and also accelerates wireless traffic via hardware with *direct-link technology*, giving superior Wi-Fi performance and full QoS independent of amount of Wi-Fi traffic. The wireless routing performance is well beyond 600 Mbps in the home.

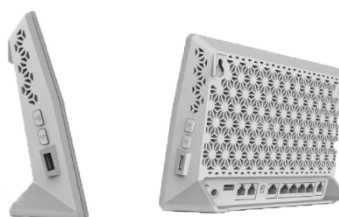
The new radio is fully backwards compatible with the 802.11n standard both at 2.4 and 5 GHz. Meaning that today many devices can benefit from improved Wi-Fi with the new 5GHz WLAN interface.

The HG2280 uses an *any-client beamforming* technology that improves coverage on a per client basis, particularly suitable for clients that are equipped with only one antenna, such as smart phones or tablets. Since beamforming also works for 802.11n, the benefits comes to all clients, new and old.

The HG2280 is built with multi-access, and fits very well in an Operator deployment for FTTB/H and VDSL2.

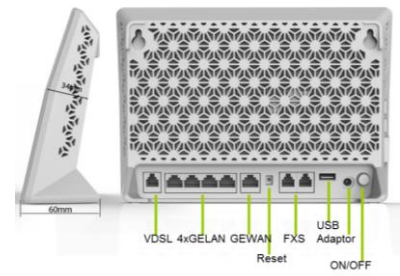
The HG2280 has an option for DECT/ CAT-iq, allowing high definition voice and bring speech quality to a new level. It also opens a seamless path to the smart home services with the support for ULE, Ultra-Low Energy.

The HG2280 product family runs all the services offered in the Tilgin HGA and is prepared for all foreseeable future services. Powered by HGA, makes the HG2280 very flexible to configure, monitor and use for new services. See details in HGA datasheet.



# Tilgin HG2280 Home Gateways

With the HG2280 family, Tilgin continues the evolution of its products by adopting new technologies to guarantee a state of the art operator offering.



## HG2280 Model Configurations

Model	Memory		WAN			VoIP			LAN and Home Networking					
	Flash (MBytes)	RAM (MBytes)	xDSL port	ADSL fallback	Ethernet port 10/100/1000	PSTN	CAT-iq	ULE	Ethernet ports	USB Host ports	WLAN			
											SSID	WPS	2.4 GHz	5 GHz
HG2281a	128	128	1	Annex A	1	2 x FXS	No		4 x GE	2	4+4	Yes	802.11n MIMO 2x2 2 streams	802.11ac MIMO 3x3 3 streams
HG2281b				Annex B										
HG2282a				Annex A										
HG2282b				Annex B		No								
HG2284a				Annex A										
HG2284b				Annex B		2 x FXS								

All products support 2000 Mbps accumulated routing utilized with the built-in router engine.  
All products support Line rate switching on all interfaces simultaneously.

xDSL WAN	WLAN interfaces	Regulatory Compliances
ITU-T G.993.2 (VDSL2), Annex B, Profiles: 8,12,17 and 30 ITU-T G.993.5 (VDSL2), Vectoring ITU-T G.993.1, T1.424, TS 101 270 (VDSL1) ITU-T G.992.1/3/5 (ADSL1/2/2+) Annexes A, B, I, J, L, M	IEEE 802.11n, 2.4GHz MIMO 2x2, two spatial streams 300 Mbps link speed 4 SSID Any-client beamforming	CE mark WEEE RoHS
<b>Ethernet WAN</b> 10/100/1000 Base-Tx Autoneg, Auto MDI/MDI-X Connector: RJ-45	IEEE 802.11i/WEP, WPA, WPA2 per SSID IEEE 802.11e/WMM, QoS for voice and video over WLAN WPS Solutions, Wireless Protected Setup, with PIN and Push Button Automatic channel bandwidth and optimum channel selection Internal antennas	<b>Physical Specifications</b> Dimension 220x160x36 Weight: 0.65 Kg Operating temperature: 0-40C/ 32-104F Non-operating temperature: -20-60C/ -4-140F Operating humidity, RH, non-condensing: 10-90% Non-operating humidity, RH, non-condensing: 5-95% External Power Supply: In: 100-240VAC, Out: 12VDC 2.5A
<b>LAN interfaces</b> 10/100/1000 Base-Tx Autoneg, Auto MDI/MDI-X Connector: RJ-45	<b>Switch</b> 2048 MAC address table entries Full 4K width VLAN support Support for up to 64 simultaneous active VLAN 32 CoS queues Traffic classification based on ingress port, 802.1q, 802.1p, DSCP, MAC address, IP protocol, IPv4/IPv6 address, IP packet length, UDP/TCP ports. Stacked VLAN support Ingress port and flow based policing Programmable support for traffic monitoring Support for jumbo frames	
<b>Voice interfaces</b> Ring voltage: min 45vrms Connector: RJ-11 REN, Ring Equivalency Number per FXS: 5 CAT-iq: Versions 1.0, 2.0, 2.1 (prepared for ULE), 1880-1900 MHz		
<b>USB Interface</b> USB 2.0 Host		
<b>Green mode</b> Standby button for environmental friendly low power mode Designed for CoC compliance		

## Tilgin HG2280 and Tilgin Home Application software



Tilgin Application Software is common for and integrated to all Tilgin Home Gateways. The application software can be easily upgraded from standard to premium features by normal auto-provisioning. For further details of HGA see separate datasheet at [www.tilginsolutions.com](http://www.tilginsolutions.com).

Full matrix of Tilgin hardware and HGA Software and Software modules compliance								
	HGA5xx	CAT-iq voice	ULE smart home	Wi-Fi hotspot	Storage	Secure access	3G – LTE WAN	SWEX
HG2281	✓			✓	✓	✓	✓	✓
HG2282	✓			✓	✓	✓	✓	✓
HG2284	✓	✓	✓	✓	✓	✓	✓	✓