Let's talk tech

Beyond compliance with industry standards, the newest Siemens Gigaset WiMAX products feature state-of-the-art technology to provide a flexible last mile solution: a wide range of connectivity options, intelligent signal transmission and powerful remote device management.

Connectivity

Home connectivity doesn't stop with Ethernet ports. Select Gigaset gateways and modems can include one or more FXS ports, a USB host, integrated WLAN with one-button on/off, and full PBX functionality. On Gigaset gateways, SIP and PBX each offer up to six VoIP accounts or extensions. And with a throughput of up to 20 Mbps on all Gigaset WiMAX devices, subscribers will benefit from high-speed broadband access.

Advanced Antenna Technologies

For optimal capacity, throughput and coverage, all Siemens WiMAX CPEs are Wave 2 compliant. The indoor CPEs combine two integrated high gain antennas which support MIMO (Matrix A and B) and use adaptive beamforming to boost signal strength between the base station and WiMAX devices. They also employ Space-Time-Coding (STC) and Spatial Multiplexing (SM) to improve coverage and effectively double the data throughput. In demanding environments, all indoor CPEs can connect to an external outdoor antenna. Siemens offers outdoor antennas with a gain of up to 18 dBi.

Remote Device Management

Remote device management is key to successful WiMAX deployments. Siemens' approach eliminates costly truck rolls or prolonged technical support for the service provider. And through secure remote provisioning, authentication, configuration and general management, Gigaset WiMAX devices ensure a positive experience for the subscriber. With the field-proven Gigaset Software Suite, Siemens offers a powerful set of remote device management tools based on TR-069. Of course, all Siemens Gigaset WiMAX devices support both the TR-069 and the OMA-DM protocols specified by the WiMAX Forum.

The Siemens Gigaset WiMAX range

	IEEE 802.16-2005				NICs	Outdoor modem	IEEE 802.16-2004		
	Gigaset SX686 WiMAX	Gigaset SX685 WiMAX	Gigaset SX682 WiMAX	Gigaset SE681 WiMAX			Gigaset WiMAX Pack	Siemens 2010	Gigaset SE471 WiMAX
Device	WiMAX gateway with WLAN	WiMAX gateway	WiMAX VoIP modem	WiMAX modem	Portable WiMAX devices	WiMAX outdoor modem	Two-box gateway solution	WiMAX outdoor modem	WiMAX modem
Set-up									
Fully self-installing over the air | web interface	■|■	■|■	■|■	■|■	■|■	■|■	■|■	■|■	■|■
Networking									
Number of Ethernet ports (10/100 BaseT)	4	4	1	1	N.A.	1 (Power over Ethernet 802.1af)	4	1	1
Bridge or router	■	■	■	■	Modem	■	■	■	■
PPPoE, static/dynamic IP	■ (multiple connections)	■ (multiple connections)	■	■			■ (multiple connections)	■	■
DHCP client | server	■|■	■|■	■|■	■|■	■|□	■|■	■|■	■|■	■|■
VLAN tagging based on TOS bits and traffic management	■	■	■	■	□	■	■	■ (on/off)	■ (on/off)
Pass through: VLAN, PPPoE and VPN	■	■	■	■	□	■	■	■	■
Integrated WLAN access point (802.11g/b)	■	□	□	□	□	□	■	□	□
USB 2.0 (host) 500 mA	■	■	□	□	□	□	■	□	□
Voice features									
Number of SIP accounts	6	6	1	0	0	0	6	0	0
Number of FXS ports	2	2	1	0	0	0	2	0	0
PBX functionality (e.g., CLIP, call forwarding, conferencing) for up to 6 extensions, analog & LAN	■ + WLAN	■	□	□	□	□	■ + WLAN	□	□
Data rate up to 20 Mbps total throughput	■	■	■	■	■	■	■	■	■
Security									
EAP-based authentication and data encryption	■	■	■	■	■	■	□	□	□
PKMv1, X.509	□	□	□	□	□	□	■	■	■
Basic firewall | stateful inspection firewall	□|■	□|■	■|□	■|□	□|□	■|□	□|■	□|□ (NAT)	□|□ (NAT)
Parental control | content filtering	■|■	■|■	□|□	□|□	□|□	□|□	■|■	□|□	□|□
WEP, WPA/WPA2, MAC filtering, WPS	■	□	□	□	□	□	■	□	□
Quality of service									
Multi-level QoS via traffic classification and SLA	■	■	■	■	■	■	■	■	■
Remote device management									
Auto-provisioning, remote management and software update based on TR-069 and OMA-DM	■	■	■	■	■	■	■	□	□
Admin web, FTP, TFTP	■	■	■	■	■	■	■	■	■
Antenna technology									
Two internal antennas for receive, one for transmit (7-9 dBi)	■	■	■	■	□	□	□	□	□
Desktop antenna	□	□	□	□	□	□	■	■	■
Several antenna options	□	□	□	□	■	□	■	■	■
Two omni antennas for receive, one for transmit	□	□	□	□	■	□	□	□	□
Optional WiMAX outdoor antenna: gain up to 18 dBi	■	■	■	■	□	■ (integrated)	■	■ (integrated)	■
External WLAN antenna	■	□	□	□	□	□	■	□	□
MIMO (Matrix A and B) and beamforming	■	■	■	■	■	■	□	□	□
Output power in dBm	Up to 26	Up to 26	Up to 26	Up to 26	Up to 23	Up to 26	Up to 26	24	Up to 26
Supported frequency bands in GHz[1]	2.3-2.7, 3.4-3.8	2.3-2.7, 3.4-3.8	2.3-2.7, 3.4-3.8	2.3-2.7, 3.4-3.8	2.3-2.7, 3.4-3.8	2.3-2.7, 3.4-3.8	3.4-3.6	3.4-3.6	3.4-3.6
Availability	June 08	June 08	April 08	April 08	April 08	June 08	Available now	Available now	Available now

■ yes □ no   [1] others depending on market development

A partner you can trust

Siemens Home and Office Communication Devices (SHC) is a leader in both broadband data devices and cordless voice phones. As these two technologies converge and expand, SHC is perfectly positioned to provide the best next-generation home and enterprise WiMAX communication solutions for service provider deployments. With our Gigaset Software Suite, we can also offer end-to-end solutions for managing all aspects of your broadband services. Learn more on the Gigaset Service Provider Portal: **http://gigaset.siemens.com/provider**

SIEMENS

Gigaset WiMAX IEEE 802.16-2005

The first choice in last mile WiMAX solutions

CORDLESS HOME COMMUNICATION **Gigaset**

Choose an industry leader

With a product range designed to support any WiMAX deployment, Siemens Gigaset is the perfect partner for WiMAX solutions. A decision to partner with Siemens Gigaset is a four-fold choice – in favor of cost, flexibility, experience and quality.

1 Choose low TCO

Optimize total cost of ownership (TCO) by choosing Siemens Gigaset WiMAX devices. Based on global IEEE standards such as 802.16-2005 and Wave 2, they are interoperable by design. Furthermore, they are fully self-installing and easily manageable both on-site and remotely via open standards.

2 Choose from a diverse portfolio

Every deployment is different: residential or business, indoor or outdoor, fixed or portable – or a complex mix of requirements. From NICs and feature-rich gateways to outdoor modems and two-box solutions, Siemens' impressive portfolio of WiMAX devices offers service providers the flexibility of a tailor-fit custom solution.
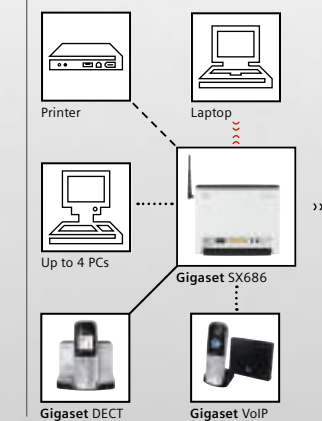
3 Choose experience

Siemens has a proven track record of supporting large scale roll-outs. Service providers benefit from Siemens' experience with logistical planning, provisioning and a global footprint – as well as tried-and-tested solutions like the Gigaset Software Suite for auto-provisioning and remote management.
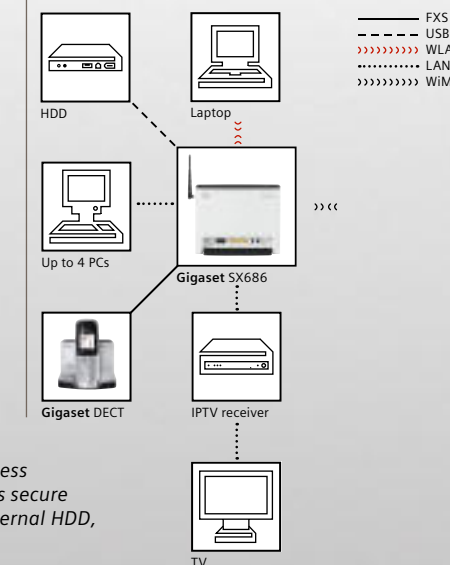
4 Choose quality

Each Siemens Gigaset WiMAX CPE is designed, developed and manufactured in Germany according to the most stringent quality and environmental standards.

IEEE 802.16-2005 WiMAX devices

Powerful new gateways and residential modems make the Siemens Gigaset WiMAX portfolio better than ever. All are Wave 2 certified, including MIMO A and B and beamforming.

Typical small business network scenario

Printer | Laptop
Up to 4 PCs | Gigaset SX686
Gigaset DECT | Gigaset VoIP

Typical residential network scenario

FXS · USB · WLAN · LAN · WiMAX

HDD | Laptop
Up to 4 PCs | Gigaset SX686
Gigaset DECT | IPTV receiver
TV

Flexible enough to be used in both residential and business environments, the Gigaset SX686 WiMAX gateway offers secure local networking of a desktop PC and laptop, printer, external HDD, IPTV receiver, fax machine and DECT/VoIP phone.
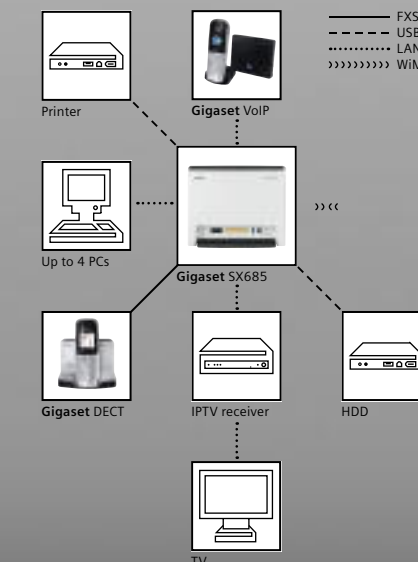
Gigaset SX686 WiMAX

Indoor WiMAX gateway with WLAN for a superior networking solution for small office or small enterprise users and the demanding residential user

› Integrated WLAN for wireless network connectivity, supporting WLAN handsets
› Convenient button to easily switch WLAN on or off
› 4 Ethernet ports for network connectivity in the office or at home
› 1 USB host to connect a printer or external hard drive
› Supports up to 6 SIP accounts for VoIP
› 2 FXS ports to connect analog phones or a fax machine
› PBX functionality (e.g., CLIP, call forwarding, conferencing) for up to 6 extensions
› Multiple connections enabled
› Stateful inspection firewall
› Parental control and content filtering

Color
○ White

Gigaset SX685 WiMAX

Indoor WiMAX gateway for an optimal networking solution for small office or small enterprise users and the demanding residential user

› 4 Ethernet ports for network connectivity in the office or at home
› 1 USB host to connect a printer or external hard drive
› Supports up to 6 SIP accounts for VoIP
› 2 FXS ports to connect analog phones or a fax machine
› PBX functionality (e.g., CLIP, call forwarding, conferencing) for up to 6 extensions
› Multiple connections enabled
› Stateful inspection firewall
› Parental control and content filtering

Color
○ White

FXS · USB · LAN · WiMAX

Printer | Gigaset VoIP
Up to 4 PCs | Gigaset SX685
Gigaset DECT | IPTV receiver | HDD
TV

PC/Laptop | Gigaset VoIP
FXS · LAN · WiMAX
Gigaset DECT | Gigaset SX682

PC/Laptop
LAN · WiMAX
Gigaset SX681

Gigaset SX682 WiMAX

Indoor VoIP WiMAX modem for the residential or home office user

› 1 Ethernet port to connect a PC or SIP-based phone for VoIP
› 1 FXS port to connect an analog phone or fax machine
› Basic firewall

Color
○ White

Gigaset SE681 WiMAX

Basic indoor WiMAX modem for the residential user

› 1 Ethernet port to connect a PC or home network
› Basic firewall

Color
○ White