

Product Specifications

4-Port SIP VoIP Gateway (4 FXS)

VGW-420FS

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2020/8/17	Marc Liao	Initial Release

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1. PRODUCT DESCRIPTION



High Quality yet Affordable for All Businesses

PLANET VGW-420FS enterprise-class 4-port SIP VoIP Gateway provides added flexibility during migration to Unified Communications by supporting the traditional analog devices. These devices include analog phones, fax machines, modems, voicemail systems and speakerphones.

Enhanced, Full-Featured Business Gateway

PLANET VGW-420FS 4-port FXS SIP VoIP Gateway is a fully IETF SIP RFC3261 standard compliant residential gateway that provides a total solution for integrating voice-data network, with built-in SIP trunk and TLS/SRTP security, up to 4 concurrent connections. Voice communications can be established from anywhere around the world, and it not only provides quality voice communications, but also offers secure, reliable Internet sharing capabilities for daily voice and Internet communications.

Distributed VoIP Network Infrastructure

PLANET VGW series is easy to use for all types of businesses. The VGW-420FS offers quality voice communications and real-time fax data over IP networks and it does not need human resources to deploy a VoIP network. With the optimized SIP architecture, PLANET VGW-420FS is the ideal choice for P2P/SIP proxy (IP PBX) voice chat, and ITSP cost-saving solution.

2. PRODUCT FEATURES

► SIP Applications

- IETF SIP RFC3261 based on UDP/TCP/TLS
- 4-line FXS connects to analog phone set or PABX
- Fax over T.38 and Pass-through
- ITU-T G.711 A-law, G.711 μ -law, G.723.1 and G.729 voice coding
- In-band / out of band DTMF (RFC4733, RFC2833 / SIP INFO)
- Echo cancellation exceeding ITU-T G.168, up to 128ms tail length
- Supports SIP Trunk and Caller ID: DTMF/FSK CLI Presentation

► Internet Features

- Supports SNMP v1/v2/v3
- Supports VLAN 802.1P and 802.1Q
- Supports Layer3 QoS and DiffServ
- Supports STUN (RFC 3489) and Outbound Proxy
- Supports TR069 and Auto Provisioning
- Supports TLS/SRTP Security

► **Call Features**

- Call waiting/transfer (Blind transfer, Attend transfer)
- Call hold /Quick pick
- Call Forwarding Unconditional
- Call Forwarding on No Reply
- Hotline/Speed Dial/Direct IP Call
- Do Not Disturb (DND)/Three-way conferencing

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

CPU/DSP	MTK MT7620
SDRAM	128M
Flash	16M

3.2 FUNCTION SPECIFICATIONS

Product	VGW-420FS
Hardware	
WAN	1 x 10/100BASE-TX RJ45 port
LAN	1 x 10/100BASE-TX RJ45 port
Voice	4 x RJ11 connection (4 x Foreign eXchange Station)
Weight	200g
Dimensions (W x D x H)	140 x 86 x 25 mm
Power Requirements	100-240VAC, 50-60 Hz@DC12V 1A
Power Consumption	5W
Protocols and Standard	
FXS	<ul style="list-style-type: none"> ■ Dial Mode: DTMF and Pulse ■ Pulse: 10 and 20 PPS ■ Caller ID: DTMF/FSK CLI Presentation ■ Max Cable Length: 3KM ■ Reversed Polarity ■ Programmable Call Progress Tone
Voice & Fax	<ul style="list-style-type: none"> ■ G.711A/U law, G.723.1, G.729A/B, G.726 and iLBC ■ Silence Suppression ■ Comfort Noise Generation(CNG) ■ Voice Activity Detection(VAD) ■ Echo Cancellation(G.168), with up to 128ms ■ Adaptive (Dynamic) Jitter Buffer ■ Hook Flash ■ Programmable Gain Control ■ T.38/Pass-through ■ Modem/POS ■ DTMF mode: Signal/RFC2833/INBAND ■ VLAN 802.1P and 802.1Q ■ Layer3 QoS and DiffServ
VoIP	<ul style="list-style-type: none"> ■ Protocol: SIP v2.0 (UDP/TCP), RFC3261, SDP, RTP(RFC2833), RFC3262, 3263, 3264, 3265, 3515, 2976, 3311 ■ RTP/RTCP, RFC2198, 1889 ■ RFC4028 Session Timer ■ RFC3266 IPv6 in SDP ■ RFC2806 TEL URI ■ RFC3581 NAT and report ■ Primary/Backup SIP Server ■ Outbound Proxy ■ DNS SRV/A Query/NATPR Query ■ SIP Trunk ■ Early Media/Early Answer ■ NAT:STUN, Static/Dynamic NAT

Supplementary Service	<ul style="list-style-type: none"> ■ Call Waiting ■ Blind Transfer ■ Attend Transfer ■ Call Forward on Busy ■ Call Forward on No Reply ■ Unconditional Call Forward ■ Warm/Immediately Hotline ■ Call Hold ■ Do-not-disturb ■ 3-Way Conferencing ■ Message Waiting Indicator
Software Features	<ul style="list-style-type: none"> ■ Hunting Group ■ Web ACL ■ Telnet ACL ■ Action URL ■ PPPoE/IPv4/IPv6 ■ Digitmap ■ Bandwidth Optimization ■ Routing Rules based Prefixes ■ Caller/Called Number Manipulation
Management	<ul style="list-style-type: none"> ■ SNMP v1/v2/v3 ■ TR069 ■ Auto Provisioning ■ Web/Telnet ■ Configuration Backup/Restore ■ Firmware Upgrade via Web ■ CDR ■ Syslog ■ Ping and Tracert Test ■ Network Capture ■ Outward Test (GR909) ■ NTP and Daylight Saving Time ■ IVR local Maintenance
Standards Conformance	
Emission	CE, FCC

3.3 PHYSICAL SPECIFICATIONS:

Dimensions:

140 x 86 x 25mm (W x D x H)

Weight:

200g

Outlook:



LED Definition:

■ System

LED	Color	Function
PWR	Green	Lights to indicate that the SIP VoIP Gateway has power. Lights off to indicate that the SIP VoIP Gateway has no power.
RUN	Green	Blinks to indicate the system is working. Lights to indicate the system is booting.

■ 10/100BASE-TX/RJ11 Interfaces

LED	Color	Function
WAN	Green	10/100BASE-TX RJ45 socket for WAN port, connecting to wide area network.
LAN	Green	10/100BASE-TX RJ45 socket for LAN port, connecting to PC for management purpose.
Line 0-3	Green	Connected to phone with RJ11 analog line. FXS port is connected to your telephone sets or fax.

3.4 ENVIRONMENTAL SPECIFICATIONS

Operating:

Temperature: 0°C ~40 degrees C

Relative Humidity: 10% ~ 90% (non-condensing)

Storage:

Temperature: -20°C ~80 degrees C

Relative Humidity: 10% ~ 90% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

Power Requirements: 100-240VAC, 50-60 Hz, 12V DC, 1A Power Adapter

Power Consumption:

LOADING INPUT	Full Loading
	5 watts/17BTU
12V DC, 1A	

3.6 REGULATORY COMPLIANCE

CE, FCC

3.7 RELIABILITY

MTBF > 50,000Hrs @ 25 degrees C

3.8 BASIC PACKAGING

<input checked="" type="checkbox"/> The SIP VoIP Gateway	x 1
<input checked="" type="checkbox"/> Quick Installation Guide	x 1
<input checked="" type="checkbox"/> DC 12V,1A Power Adapter	x 1
<input checked="" type="checkbox"/> RJ45 Ethernet Cable	x 1
<input checked="" type="checkbox"/> RJ11 Telephone Wire	x 1

3.9 PACKING INFORMATION

Box Dimensions (W x D x H)	175 x 185 X 65 mm
Gross Weight	0.42kg
Carton Dimensions (W x D x H)	385 x 355 x 370 mm
Total Carton Weight	9.13kg
Quantity	20pcs in one carton