VRG-21412-WF-G Series Triple Play Gateway

NAT Bridge hybrid mode | TR-069 | Power down trap | DHCP auto provision | Cable tray

4 ports 10/100Base-TX, 2 ports VoIP FXS and 1 port 100Base-FX uplink VoIP Residential Gateway with built-in IEEE 802.11b/g draft WiFi module

Features

- NAT/Bridge Hybrid Mode
  VRG-21412-WF-G supports NAT/Bridge hybrid mode to intelligently prioritize transported video/voice/data traffic and optimize the service performance as well as utilization of limited IP resource for service providers

- Flexible Auto Provision Schemes
  Provide either DHCP auto provision or TR-069 to fulfill the choice of deployment scale and reduce the OPEX of device maintenance for service providers

- Power Down Trap
  Built-in CTS unique SNMP power down trap function to rapidly identify network fault due to power outage and reduce truck rolls to save OPEX for operators or service providers

- Built-in Cable Tray
  VRG-21412-WF-G built-in cable tray is for friendly fiber management in the FTTH deployment

Target Applications

- Managed triple play CPE with built-in cable tray is for FTTH deployment application to deliver high speed internet, VoIP and IPTV triple play service.

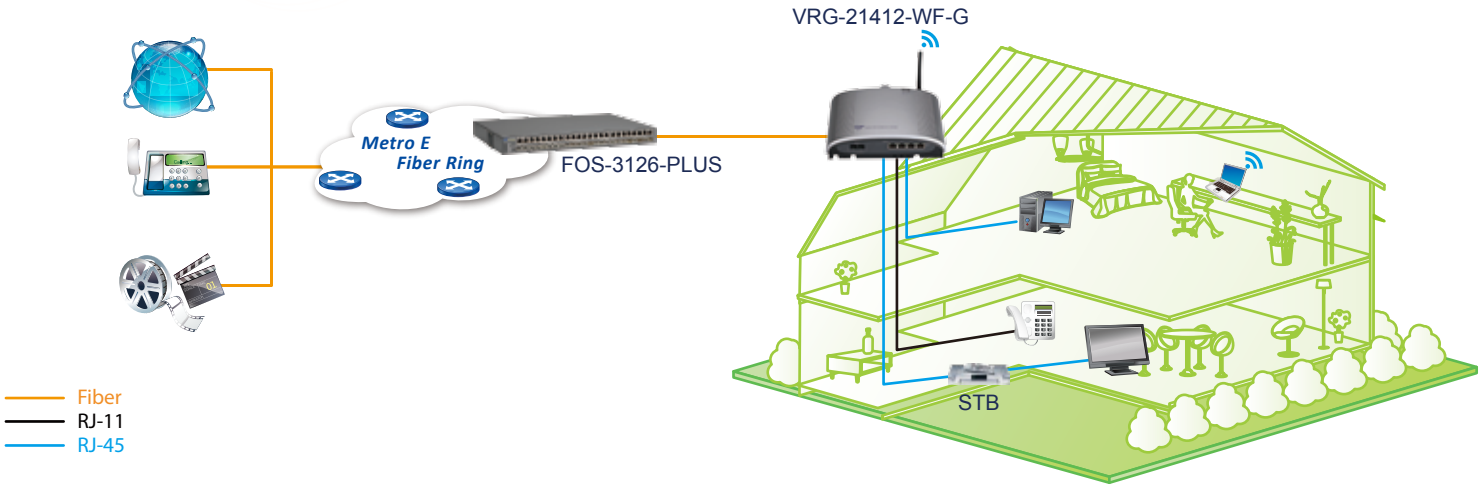
Description

Connection Technology Systems (CTS) VRG-21412-WF-G series triple play solution is a Web & SNMP managed fiber optical residential gateway which is designed to meet the FTTH deployment for delivering high speed internet access, VOIP and IPTV or traditionally CATV services. VRG-21412-WF-G provides one fiber optic ports for broadband internet connections, four 10/100base-TX RJ45 ports for LAN application and two FXS ports for VoIP telephony service.

Aim at the operators or service providers who will deliver the multiple services for residential users, the VRG-21412-WF-G can allow the triple play service in a Fiber-to-the-home deployed infrastructure in a single device. The extensive four 10/100Base-TX RJ45 ports and IEEE 802.11b/g WiFi connection allow users to connect PC or laptop for internet application such as web surfing, email, file upload/download and online gaming…etc as well as connect a set top box for provisioning video application like IPTV, VoD and E-learning and so on. The built-in two FXS ports support popular SIP protocol to enable the service of VoIP telephony with toll quality and can significantly reduce cost for voice communication

The fiber optic port of VRG-21412-WF-G can support connection distance from 2 km to 20 km or even reach 100 km via multi-mode fiber, single mode fiber or Bi-directional single mode fiber for the deployment to the household, apartment or campus. The device management is based on popular Web or SNMP interface, to fulfill the requirement of mass deployment, the device also supports the auto provisioning mechanism to allow the operators or service providers managing the device configuration automatically and dynamically. Consequently, it can significantly help saving the OPEX (operational cost) for the operators or service providers.

Application Diagram



Specification

Interface
10/100Base-TX RJ45 x 4
100Base-FX F/O x 1
VoIP FXS RJ-11 x 2
IEEE 802.11b/g WiFi x 1

Standards
IEEE 802.3 10Base-T
IEEE 802.3u 100Base-TX/FX
IEEE 802.1p Priority
IEEE 802.1q Tag VLAN
IEEE 802.3x Flow Control
SIP (RFC3261)
G.711/G.723/G.726 /G.729 Annex A/B

H/W Specification
MAC Address Table: 2K
Support up to 16 VLAN Groups
VLAN ID: 4K
Priority Queues: 4 Queues

Forward / Filter Rate
10M: 14,880/14,880pps
100M: 148,800/148,800pps

LED
Power, FDX, Status, Speed,
F/O Link/Act, TX Link/Act

Layer 2 Switching
PPPoE Client
IEEE 802.1p priority / 802.1Q tag VLAN
Q-in-Q VLAN tag
Application QoS
Rate limit control

Layer 3 routing
NAT/Bridge hybrid mode
DHCP client & server
DNS client & DDNS
IGMP proxy
IGMP snooping v1/v2
DMZ host

Security
Attack detection & blocking
Firewall

VoIP Function
VAD & CNG
Echo cancellation (G.165/G.168)
DTMF tone generation
T.38 Fax/modem relay
T.38/G.711 Fax pass through
Adaptive jitter buffer
Dialing plan
Caller ID display
Call forward
Call hold
Call transfer
3-way conference

Network Management
Web UI management
SNMP Management
Support SNMP v1/v2c
URL filtering & filtering schedule
SNTP
Event syslog
Power down trap
FTP/HTTP firmware upgrade
Remotely FTP upgrade
DHCP auto provision
TR-069 *

Power Requirement
External Power adaptor
AC input: 100VAC~240VAC
Frequency range: 50~60Hz
DC output rating: 12V/1.5A

Power Consumption
- AC side: 7.5 W

Environmental Condition
Operation: 0° ~ 50℃
Storage Temperature: -20° ~ 60℃
Humidity: 5% ~ 90%, non-condensing

Dimension & Weight
Size: 210 x 153 x 54.5mm (WxDxH)
Shipping Weight: 0.7KG

EMC/Safety
FCC Class A,
CE

For further reports, please contact us for update

" * " means optionally SW upgraded

Order Information

MODEL	WAN			LAN	WLAN	FXS Port
	Speed	Type/Connector	Distance			
VRG-21412FC-WF-G	100M	MM/SC	2KM	4 x 10/100M TP	802.11b/g	2
VRG-21412FT-WF-G	100M	MM/SC	2KM	4 x 10/100M TP	802.11b/g	2
VRG-21412FC(SM-30/50/80/100)-WF-G	100M	SM/SC	30/50/80/100KM	4 x 10/100M TP	802.11b/g	2
VRG-21412W2A(SM-20/40)-WF-G	100M	WDM/SC	20/40KM	4 x 10/100M TP	802.11b/g	2
VRG-21412W2B(SM-20/40)-WF-G	100M	WDM/SC	20/40KM	4 x 10/100M TP	802.11b/g	2
VRG-21412SFP-WF-G	100M	SFP	-	4 x 10/100M TP	802.11b/g	2
VRG-21412TP-WF-G	10/100M	RJ45	-	4 x 10/100M TP	802.11b/g	2

Built-in Cable Tray Overview

* This is an overview of CTS VRG-21412G series and does not represent specific product