

# NVG37x

## Dual/Triple Play Residential Gateways

### PRODUCT OVERVIEW:

The ARRIS NVG37x-Series Triple Play (Voice, Video and Data) and Dual-Play (Video and Data) Residential Gateways are designed to deliver robust video, high-speed data and (optionally) primary line telephony. This full-featured Gateway provides a cost-effective way for Service Providers to deploy broadband services over Active Ethernet and GPON deployments utilizing a Small Form-factor Pluggable (SFP) module supporting single-mode/short-haul (SX), multi-mode/long-haul (LX) fiber modules, or a GPON ONT SFP. This high performing converged services platform is made possible with the ARRIS 9x CPE Software.

Including advanced Quality of Service (QoS) features, security firewall, and extensive remote management features, the NVG37x-Series Gateways enable reliable, single-platform delivery of voice-over-IP (VoIP), data, and streaming broadcast-quality video over the broadband network. Users can take advantage of:

- Simultaneous use of phone, video, and high-speed data
- IPTV video
- Four Gigabit Ethernet ports for high-speed home networking
- Concurrent Wi-Fi support for 802.11 b/g/n on 2.4 GHz, and 802.11ac on 5 GHz
- Primary line VoIP telephone service

The NVG37x-Series Gateways use Multiple-Input and Multiple-Output (MIMO) technology, eliminating the need for wired connections and enabling users to easily network all of their wireless 802.11b/g/n/ac-equipped devices. Its four 10/100/1000 Ethernet ports give subscribers the option of setting up a home network to share a printer and data, music, and video files. Thus, the NVG37x-Series Gateways enables users to maximize the high-bandwidth potential of their home or business network.





### Service Assurance

The advanced features of the NVG37x-Series Gateways help Service Providers improve efficiency and reduce costs. Support for 802.1x WAN supplicant simplifies CPE authentication to the Service Provider network and eliminates the subscriber need to manually enter network access credentials. The ARRIS 9x CPE Software is scalable and forward looking, with the ability to support an upgrade path to more advanced features such as OSGi and DLNA. And, because ARRIS designs its Gateways to be remotely manageable via industry standard TR-069/TR-098, the NVG37x-Series Gateways are interoperable with any ACS solution that follows the Broadband Forum's TR-069/TR-098 specification.

### Platform Optimization

The NVG37x-Series Gateways are available in four models, cost optimized to meet the needs of the Service Provider:

- NVG371: FTTH/Ethernet Gateway with 2.4GHz 802.11b/g/n
- NVG373: FTTH/Ethernet Gateway with 2.4GHz 802.11b/g/n and 5GHz 802.11ac
- NVG376: FTTH/Ethernet Gateway with 2.4GHz 802.11b/g/n and VoIP
- NVG378: FTTH/Ethernet Gateway with 2.4GHz 802.11b/g/n, 5GHz 802.11ac and VoIP

The features and specifications of the NVG37x-Series Gateways are further described below.

GENERAL SPECIFICATIONS		Embedded Firmware, Encoding and Access Protocols (continued)	
<b>Interfaces</b>		Device Management	Password protected access, statistics, and log reporting
WAN	One SFP transceiver (LX, SX, GPON ONT modules) One-port 10/100/1000 Ethernet (RJ-45) AP-TLS, EAP-TTLS, EAP-SIM and (optional) 802.1x	Remote Management	TR-069/TR-098, TR-104, TR-111, WebUI, CLI (Telnet), SSH
LAN	Concurrent Wi-Fi support for 802.11b/g/n and (optional) 802.11ac Four-port 10/100/1000 Ethernet switch, RJ-45 USB2.0 network interface (Optional) Single-port, dual line voice FXS, RJ-14	Local Management	TR-064, UPnP, WebUI, CLI (Telnet), captive portal
<b>Embedded Firmware, Encoding and Access Protocols</b>		Utilities	Ping, traceroute, reverse DNS, NTP, diagnostics
IP Addressing and Routing	IPv4, IPv6 / 6rd DHCP server DNS proxy, dynamic DNS support Multiple subnet support	<b>Wi-Fi Features</b>	
Traffic Management and QoS (Quality of Service)	Network Address Port Translation (NAPT) Application Level Gateway (ALG) support IP maps (pinholes) Diffserv QoS with Weighted Fair Queuing IGMPv2, IGMPv3 with Fast Leave IEEE 802.1P/Q VLANs DSCP setting for SIP/RTP Speed Test Deep Packet Inspection (DPI)	Concurrent Wi-Fi	802.11 b/g/n and (optional) 802.11ac
Security	Stateful packet inspection firewall Virtual DMZ/IP pass-through Denial of service (DoS) protection VPN pass-through (PPTP, L2TP, IPSec)	Wi-Fi Characteristics	2.4 GHz support, 2x2 integrated omni-directional antenna with diversity (Optional) 5 GHz support, 3x3 or (optional) 4x4 5 GHz UNII bands (5.15-5.35 GHz, 5.470-5.725 GHz and 5.725 – 5.850 GHz bands) 20MHz, 40MHz, 80MHz supported
		Wi-Fi Features	Multiple BSSID (unique authentication per SSID) Wi-Fi Protected Setup (WPS) Wi-Fi Multimedia (WMM), WMM-PS (power save) Transmit power control
		Wi-Fi Security	WEP (64-bit, 128-bit, 256-bit) encryption WPA, WPA-PSK, 802.11i/WPA2, WPA2-PSK, EAP-TTLS MAC address filtering



## GENERAL SPECIFICATIONS (continued)

### Voice Features (optional)

General Voice Features	SIP v2 call, SIPv2 call control DNS SRV, A records re-registration with primary SIP proxy server Geo-Redundancy—DNS SRV, A records Flexible dial plan support Hook flash event signaling RTP audio transport RFC2833 RTP payload, SIP INFO and InBand DTMF mode
Voice Audio Codecs	G.711 (a-law and u-law), G.729a and G.726 (16, 24, 32, 40 kbps) AMR (narrowband) Adaptive jitter buffer PLC—(G.711 Appendix I and Frame repeat) VAD (voice activity detection) with silence suppression and comfort noise generation G.168 network echo cancellation G.167 acoustic echo cancellation
FAX Relay Protocols Compliance	T.38 pass-through and over IP Fax/modem detection control, T.38 (IP) compliant Group 3 and SG3 fallback to Transport T.30, V.34 fax and modem bypass (automatic fallback to G.711) support
CLASS Calling Features	Call Waiting; Call Hold; Call Resume; Call Forward Unconditional; Call Forward on Busy; Caller ID; 3-Way Conference; Call Consultant; Call Transfer and network-initiated class services—MWI messaging, VMWI via FSK

## Regulatory Compliance

General	K.21 Basic (optional K.21 Enhanced)
Europe	93/68/EEC (CE Marking Directive) 2006/95/EC (Low Voltage Directive) 2004/108/EC (EMC Directive) 1999/5/EC (R & PTE Directive) EN60950-1 (Safety) EN55022 (Emissions) EN55024 (Immunity) EN300328 (Electromagnetic compatibility and Radio spectrum Matters, 2.4 GHz) EN300386 (Electromagnetic compatibility and Radio spectrum Matters, Telecommunication Network Equipment, EMC) EN301489-1 (Electromagnetic compatibility and Radio spectrum Matters, EMC, Part 1) EN301489-17 (Electromagnetic compatibility and Radio spectrum Matters, EMC, Part 17) EN301893 (Broadband Radio Access Networks, 5 GHz)
North America	UL 60950, CUL, CSA FCC Part 15 Class B Subparts B, C and E, ICES-003 FCC Part 68, CS-03 CEC compliant

## Environmental Specifications

Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)

## Physical Specifications

Unit Dimensions	206mm High x 173mm Deep x 40mm Wide 8.1in. High x 6.8in. Deep x 1.6in. Wide
Unit Weight (with all options)	0.52 kg 1.14 lbs