

SMART/RG®

forward thinking

Gateways/ SR516ac A/VDSL2 + 5-Port 802.11ac Dual-Band WiFi



THE SR516ac DSL/FTTH GATEWAY equips Broadband and IPTV Service Providers to offer state-of-the-art 802.11ac WiFi and xDSL technologies to their customers, delivering a high-value experience at a reasonable price.

Inside the SR516ac is a highly-integrated xDSL chipset supporting 5-band VDSL2 with fallback to all legacy ADSL modes. Advanced 802.11ac Dual-Band WiFi is provided via the integrated 802.11ac 3x3 and 802.11n 2x2 Access Point, delivering a strong, reliable WiFi signal throughout the home. With the included Gigabit SmartPort™, the SR516ac can also be used as an Ethernet WAN gateway for FTTH or DOCSIS deployments where a carrier-grade router with industry-leading TR-069 management is required.

/ HIGHLIGHTS

IPv6 Enabled

Support for IPv6/IPv4 Dual Stack, IPv6 Rapid Deployment (6RD) and Dual Stack Lite (DS-Lite) transition mechanisms. The SR516ac supports IPv6 out-of-the-box today and protects Service Provider and customer investment for years to come.

Vectoring

With integrated support for the ITU-T's G.993.5 Vectoring specification, the SR516ac works in conjunction with vectoring-enabled DSLAMs to remove crosstalk interference, allowing lines to reach their full bandwidth potential, as if they were the only lines in the cable binder.

TR-069 Remote Management

SmartRG has a rich TR-069 heritage, leading the market in innovative TR-069 enabled services and solutions. Superior remote manageability reduces Service Provider operational expenses and maintenance costs.

IPTV Grade

With features such as dedicated hardware accelerator engines for wire-speed packet processing, G.inp Physical Layer Retransmission, advanced IGMP/Multicast traffic handling, and dynamic LAN port-to-PVC mapping, the SR516ac delivers the high throughput at low bit error rate required when delivering HD IPTV services and assures Quality of Service is maintained in the triple play environment.

/ FEATURES

- 4 Gigabit Ethernet ports + 1 Gigabit SmartPort™
- Dual-Band 802.11ac + 802.11n Access Point
- USB 2.0 port
- Combined WPS and Wireless on/off buttons

/ BUILT-IN SUPPORT

- VDSL2 Vectoring with G.inp
- VDSL2 profiles up to 17a, with automatic fallback to ADSL2/2+ Annexes A, L (Reach-Extended) and M (Extended Upstream Bandwidth)
- WiFi Beamforming - improves rate/reach for all clients
- IPv6, Dual-Stack, Dual-Stack Lite, and 6RD transition mechanisms
- K.21 Lightning protection
- Managed WiFi & SPI Firewall
- TR-069 Captive Portal

/ PRODUCT FEATURES

DSL

ITU-T G.993.1/2 (VDSL/VDSL2)
ITU-T G.993.5 (G.vector)
ITU-T G.992.3/5 (ADSL2/2+)

- Annex L (Reach Extended ADSL2)
- Annex M (Extended Upstream Bandwidth)

ITU-T G.992.1/2 (G.dmt/G.lite)
ANSI T1.413 Issue 2
ITU-T G.998.4 (G.inp) Impulse Noise Protection
SRA (Seamless Rate Adaptation)

WAN

Packet Transfer Mode (PTM) in both VDSL2 and ADSL2+
Up to 16 ATM PVCs or 8 PTM flows
Per-PVC packet level QoS
Supports UBR, VBR and CBR traffic shaping
Diffserv and 802.1Q prioritization

Wireless

802.11ac 1300Mbps AP with 3x3 Beamforming MIMO
802.11n 300Mbps AP with 2x2 MIMO
Wireless bridge, WDS
Multiple SSIDs, including isolated Guest SSID
WiFi QoS (WMM) and PowerSave
Wireless Security:

- Wi-Fi Protected Access (WPA, WPA2)
- AES/TKIP/WEP encryption
- 802.1x authentication

Remote Management

TR-069 Device Management
TR-098 Gateway Device Model
TR-106 Generic Device Model
TR-111 LAN Device Management
Automatic Subscriber Activation
Real-time Status and Reporting
Remote Firmware Upgrades
Custom Configuration Backup and Restore

Security

Stateful Packet Inspection Firewall
Denial of Service attack prevention
TCP/IP/Port/interface filtering rules
MAC Layer Filtering
Day-time Parental Control
DMZ host

/ ROUTING AND NETWORKING

RFC2684 Multiprotocol Encapsulation over ATM
RFC2364 PPPoA
RFC2516 PPPoE
PPPoE pass-through
802.1Q VLAN over RFC2684 bridge encapsulation
IP over Ethernet over AAL5
DNS Proxy
DHCP Server and Client
DHCP Relay
NAPT and NAT
IGMP Proxy and Snooping
RIPv1/v2
LAN port to VC mapping
Multiple Protocol VLAN Mux
Multiple Service PVC IP/Bridge/802.1p QoS
Port Mirroring for troubleshooting

/ SPECIFICATIONS AND STANDARDS

Mechanical

Dimensions: 220mm*40mm*180mm
(L*W*H) Weight: 400g

Electrical

Power Requirements:
AC power adapter: 100VAC to 240VAC @ 50/60Hz DC
voltage: 12V, 1.5A

EMC & Safety

FCC Part 15, Subpart B and ICES-003 for Class B
FCC Part 15, Subparts C & E and IC RSS-247 for RF
FCC Part 68 and IC CS-03 registered
UL 60950-1 (Bureau Veritas listed)
Overvoltage/Overcurrent: K.21 compliant

Environmental

Meets or exceeds Telcordia GR-63-CORE for:

Temperature:

- 0 to 40° Celsius (Standard Operating)
- -10 to 60° Celsius (Non-operating)

Humidity:

- 10% to 95% (Non-condensing, Standard Operating)
- 5% to 95% (Non-condensing, Non-operating)