# SMART/RG®

## Gateways / SR510n
### ADSL/VDSL2 + 5-Port 802.11n WiFi

THE SR510n DSL/FTTH GATEWAY equips Broadband and IPTV Service Providers to offer state-of-the-art xDSL and WiFi technologies to their customers, delivering a high-value experience at a reasonable price.

Under the hood of the SR510n is the very latest in Broadcom xDSL silicon: A highly-integrated xDSL chipset supporting 5-band VDSL2 with fallback to all legacy ADSL modes. WiFi is provided via the integrated 802.11n 2x2 MIMO 300Mbps Access Point with external dipole antennas, delivering a strong , reliable WiFi signal throughout the home. With the included Gigabit SmartPort™, the SR510n can also be used as an Ethernet WAN gateway for FTTH or DOCSIS 3.0 scenarios 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 SR510n 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 new G.993.5 Vectoring specification, the SR510n works in conjunction with vectoring-enabled DSLAMs to remove crosstalk inteference, 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 SR510n 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 Fast Ethernet ports + 1 Gigabit SmartPort™
- 802.11n 300Mbps Access Point
- Two USB 2.0 ports
- WPS and Wireless on/off buttons
- Automatic Broadband Connection Creation

## / 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)
- IPv6, Dual-Stack, Dual-Stack Lite, and 6RD transition mechanisms
- K.21 Lightning protection
- Managed WiFi & SPI Firewall
- TR-069 Captive Portal

501 SE Columbia Shores Boulevard, Suite 500
Vancouver, Washington, 98661 USA
+360 859 1780 / smartrg.com

# / PRODUCT FEATURES

## DSL

ITU-T G.993.1 (VDSL)
ITU-T G.993.2 (VDSL2)
ITU-T G.993.5 (G.vector)
ITU-T G.992.5 (ADSL2+)
ITU-T G.992.3 (ADSL2)
Annex L (Reach Extended ADSL2)
Annex M (Extended Upstream Bandwidth)
ITU-T G.998.4 (G.inp) Impulse Noise Protection
SRA (Seamless Rate Adaptation)
ITU-T G.992.1 (G.dmt) & ITU-T G.992.2 (G.lite)
ANSI T1.413 Issue 2

## 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
LAN as WAN (Gigabit Ethernet WAN)
Diffserv and 802.1Q prioritization

## Wireless

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 & STANDARDS

## Mechanical

Dimensions: 225mm*60mm*175mm (L*W*H)
Weight: 380g

## Electrical

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

## Electromagnetic Compatibility

Certified with FCC, IC, and CE
ETL Listed and compliant with ETSI standards

## Environmental

Overvoltage/Overcurrent:
ITU-T K.21 Compliant

Meets or exceeds Telcordia GR-63-CORE for:

**Temperature:**
0 to 55° Celsius (Standard Operating)
20 to 70° Celsius (Non-operating)

**Humidity:**
0% to 95% (Non-condensing, Standard Operating)
5% to 95% (Non-condensing, Non-operating)

**Altitude:**
@ 40°C Ambient: 60m below sea level to 1800m above
@ 30°C Ambient: 1800m to 4000m above sea level