

SMART/RG®

Gateways / SR655ac

FTTH/Bonded VDSL2 IAD + 5-Port Dual-Band 11ac WiFi



THE SR655ac FTTH/BONDED DSL INTEGRATED ACCESS DEVICE provides high performance and flexibility for broadband and triple-play subscribers, effectively bridging the gap between copper and fiber. Utilizing the very latest in broadband access silicon, the SR655ac bonds two xDSL lines, extending the rate/reach of high-bandwidth services and providing high-availability with automatic failover. Support for Super Vectoring (35b profile) doubles single-line VDSL2 performance on short loops.

Blazing fast WiFi performance is delivered by a 3x3 MIMO 802.11ac Dual-band Access Point, fully enabling delivery of triple play services over WiFi.

And, as Service Providers have come to expect, comprehensive remote management is enabled by SmartRG's industry-leading TR-069 engine.

/ HIGHLIGHTS

Speed to Burn and Room to Grow

With its dual-core Cortex-A9 CPU and twin 3x3 WiFi chipsets, the SR655ac has the power to manage whatever you throw at it without breaking a sweat, making it an excellent platform for the value-added applications Service Providers and their customers care about, like integrated media-sharing, Parental Control, home-automation, and advanced analytics.

Vectorized Bonding

With integrated support for the ITU-T's G.993.5 Vectoring specification, the SR655ac 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.

Video Grade

Regardless of your video middleware platform, the SR655ac comes fully equipped for the task. With features such as G.inp Physical Layer Retransmission, advanced IGMP/Multicast traffic handling, and dynamic VLAN mapping/tagging, the SR655ac delivers the high throughput at low bit error rate required when delivering Ultra HD video services over copper and assures Quality of Service is maintained in the triple play environment.

TR-069 Remote Management and SDN+NFV

SmartRG has a rich TR-069 heritage, leading the market in innovative cloud-based services and solutions. Superior remote manageability and advanced SDN+NFV capabilities reduce Service Provider operational expenses and maintenance costs.

/ FEATURES

- 5 Gigabit Ethernet ports
- Dual-band 802.11ac Access Point
- MIMO and SmartRG AccuBeam™ Beamforming
- Multiple internal antennas eliminate dead zones
- Gigabit Ethernet SmartPort™ for LAN or WAN
- Vectored DSL Bonding with G.inp (up to 17a profile)
- One USB 3.0 + One USB 2.0 port
- Two SIP-enabled FXS ports

/ BUILT-IN SUPPORT

- AccuBeam™ beamforming to any 802.11 device
- Advanced WiFi Analytics and QoS
- IPv6, Dual-Stack, Dual-Stack Lite, and 6RD transition mechanisms
- VDSL2 profiles up to 35b with automatic fallback to ADSL2/2+ Annexes A, L (Reach-Extended) and M (Extended Upstream Bandwidth)
- K.21 Enhanced Lightning protection
- Managed Wi-Fi & SPI Firewall
- TR-069 Captive Portal

/ PRODUCT FEATURES

DSL

ITU-T G.993.2 (VDSL2) 8/12/17/30/35 MHz profiles
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.998.1/2 ATM/PTM-based Multi-pair Bonding
Bond two pairs up to profile 17a
Single-pair operation for 30a and 35b profiles
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
Diffserv and 802.1Q prioritization

Wireless

Dual-band Beamforming 802.11ac AP
3x3 MIMO @ 2.4 & 5GHz
Multiple SSIDs, including isolated Guest SSID
WiFi QoS (WMM®) and WMM® PowerSave
WPA2, AES/TKIP encryption
HotSpot 2.0
802.1x authentication and MAC-based filtering

Remote Management

TR-069 Device Management
TR-098/181 Data Models
TR-104 VoIP Data 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

VoIP

SIP/RTP/RTCP/SDP
Outbound Proxy
Fax/modem passthrough & ITU-T T.38 Fax Relay
RFC2833 DTMF tone detection/generation
ITU-T G.168 Echo Cancellation
Silence Suppression (VAD-DTX-CNG)
Codecs: G.711, G.723.1, G.726, G.729

/ SPECIFICATIONS & STANDARDS

Mechanical

Dimensions: 220mm*40mm*220mm (L*W*H)
Weight: 550g

Electrical

Power Requirements:
AC power adapter: 100VAC-240VAC @ 50/60Hz
DC voltage: 12V, 3.5A

EMC & Safety

FCC Part 15, Subpart B and ICES-003 for Class B
FCC Part 68 and IC CS-03 registered
ETL listed, RoHS compliant

Environmental

Overvoltage/Overcurrent:
ITU-T K.21 Enhanced Mode (6kV)

Meets or exceeds Telcordia GR-63-CORE for:

Temperature:

0° to 55° C (Standard Operating)
20° to 70° C (Non-operating)

Humidity:

0% to 90% (Non-condensing, Standard Operating)
5% to 95% (Non-condensing, Non-operating)