



ZoneFlex™ 7761-CM

Dual-Band 802.11n Smart Wi-Fi® Outdoor AP with Integrated DOCSIS® 3.0 Modem

Benefits

- Integrated DOCSIS 3.0 modem with 8 x 4 bonded channels
- Unprecedented outdoor Wi-Fi
- Unified, centralized Wi-Fi management eases administration
- Unmatched Wi-Fi range and reliability
- Extended coverage means fewer APs
- Proven support for IP-based voice and video over Wi-Fi
- Strand mounted hardened enclosure for outdoor deployment
- Enables a myriad of new services and service opportunities
- Lower deployment costs and reduced truck rolls
- 40 to 90 VAC quasi-square wave power input



ARRIS ZoneFlex™ 7761-CM is the first purpose-build strand-mounted access point to combine dual-band 802.11n with an integrated DOCSIS 3.0 certified modem and patented smart antenna array technology to deliver unprecedented range and reliability for multiple system cable operators (MSOs).

Plant-powered, the 7761-CM is lightweight and can be easily installed and integrated with the cable operator's network. It leverages existing cable assets, including mounting, power, backhaul and customer service systems to quickly and easily extend wireless services to cable operators' customers.

The 7761-CM leverages the industry best dual-band 802.11n outdoor smart antenna technology to fulfill the promises of 802.11n—while delivering unparalleled simplicity, throughput, range and reliability at a fraction of the cost of conventional alternatives.

ARRIS ZoneFlex implements Ruckus-patented BeamFlex™ smart antenna technology that enables consistent, high-performance, extended coverage and multimedia support. Network operators can create different quality of service for various WLANs to provide tiered services.

ARRIS ZoneFlex is the industry's first Access Point (AP) to integrate a DOCSIS 3.0 modem supporting 8 downstream and 4 upstream bonded channels with theoretical data rates of up to 340 Mbps (downstream) and 130 Mbps (upstream).

This ARRIS solution is ideal for MSOs expanding branded broadband services through their cable infrastructure to provide hotspot services to hotels, resorts, train stations, and other public locations. ARRIS ZoneFlex 7761-CM delivers broadband services from outdoors to extend managed wireless LANs (WLANs) for strand mounted locations and where Ethernet cabling is not feasible.

The ARRIS ZoneFlex 7761-CM can be centrally managed as part of a unified indoor/outdoor wireless LAN or deployed as a standalone AP and managed individually or through the FlexMaster™ remote Wi-Fi management system.

Benefits

Integrated DOCSIS® 3.0 modem with 8 x 4 bonded channels

Ruggedized outdoor enclosure bonded 8 downstream and 4 upstream channels in a DOCSIS 3.0 certified modem

Unprecedented outdoor Wi-Fi® performance

Advanced, Smart Wi-Fi design with concurrent 802.11n dual-band radios

Unified, centralized Wi-Fi management eases administration

Centralized network management platform provides a detailed view into and control over both indoor and outdoor Smart Wi-Fi APs enabling seamless and system-wide administration of the entire wireless environment

Unmatched Wi-Fi range and reliability

Automatic dynamic beamforming with 802.11n (3 x 3) combined with unique interference avoidance technology delivers up to 9 dBi of signal gain to maximize capacity and coverage

Extended coverage means fewer APs

Directional high-gain antennas dynamically combine to deliver two- to four-times the coverage area compared to typical outdoor APs

Proven support for IP-based voice and video over Wi-Fi

A dynamic directional antenna array and expert QoS software optimize delay-sensitive, IP video and high-density voice over Wi-Fi (VoFi) applications and PoE output allows connecting other devices such as an IP camera

Strand mounted hardened enclosure for outdoor deployment

IP-67 water and dust proof plastic enclosure with strand mount for deployment at cable MSOs

Enables a myriad of new services and service opportunities

Smart Wi-Fi applied outdoors now enables new revenue-generating services such as community Wi-Fi, IP-video applications, multimedia hotspots, extended WLAN services outdoors and 3G data offloading

Lower deployment costs and reduced truck rolls

Lightweight enclosure simplifies deployment. Remote reboots between APs and Cable Modem Management minimizes truck rolls



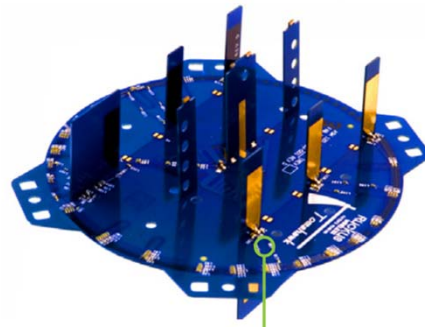
Features

- Concurrent dual-band (5 GHz/2.4 GHz) operation
- Dynamic beamforming and advanced RF management
- Automatic interference avoidance, optimized for high-density environments
- Integrated smart antenna array with over 4,000 unique patterns for ultra availability
- Standard 802.3af output for IP surveillance camera
- Strand mountable
- Extended temperature range for cold climates (-40° C)
- Multicast IP video streaming
- Four queues per client station
- 16 BSSIDs with unique QoS and security policies
- WEP, WPA-PSK (AES), 802.1X support
- Flexible tunneling with L2TP
- Band steering
- Airtime fairness
- Integrated 8 x 4 DOCSIS 3.0 modem
- Remote reboots between AP and CM
- Dynamic channel management

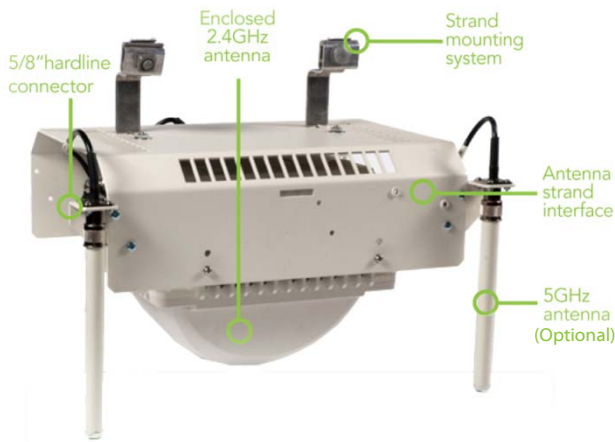
Remote monitoring and network management

ARRIS ZoneFlex™ 7761-CM can be remotely manageable using either the Ruckus Wi-Fi® FlexMaster™ Network Management platform and/or the Service Provider's own Cable Management system to take advantage of the best of both worlds in terms of cable network management and wireless monitoring.

The integrated management approach provides complete network-wide support for Fault, Configuration, and Performance Management. Patent pending software algorithm allows the ARRIS ZoneFlex 7761-CM to be remotely controlled from either the Cable MSO management system or from the Wireless mesh interface in the case of temporary network interruptions, thereby avoiding expensive and inefficient truck rolls.



A patented smart antenna array integrates six high-gain vertically-polarized and six horizontally-polarized antenna elements. This enables up to 4096 potential antenna combinations and up to 9 dBi gain, thereby delivering unprecedented range extension and signal reliability. The dual polarized smart antenna increases the effectiveness of spatial-multiplexing, resulting in higher data rates.



ARRIS ZoneFlex 7761-CM Product Highlights



Internal 2.4 GHz smart antenna array with high gain 5 GHz external antennas



Ruggedized and "not-obvious" outdoor enclosure

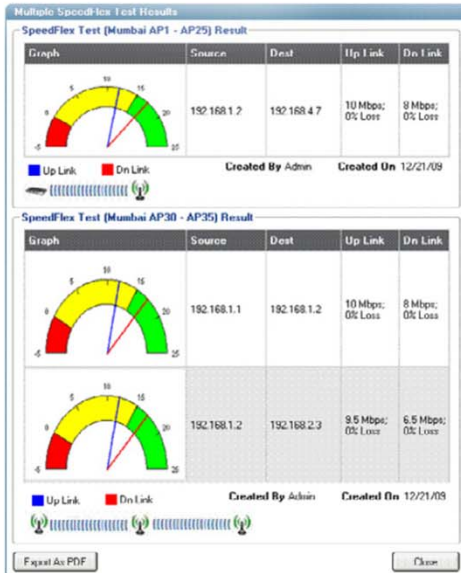


Integrated DOCSIS 3.0 cable modem to leverage existing MSO cable plant



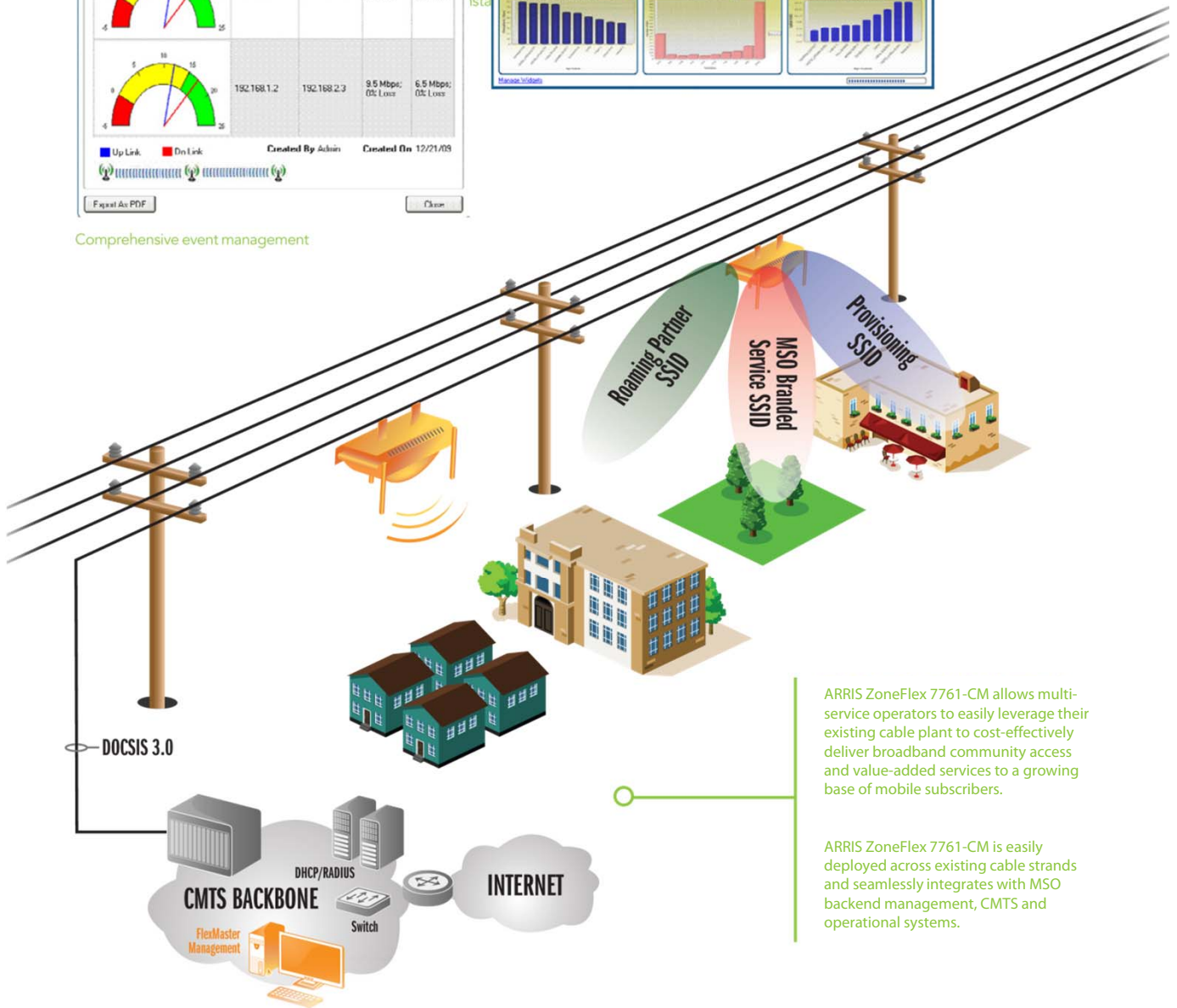
Lightweight for ease of installations

ARRIS ZoneFlex 7761-CM detailed planning and troubleshooting with FlexMaster™ Network Management



Automated and customized super dashboard

Comprehensive event management



ARRIS ZoneFlex 7761-CM allows multi-service operators to easily leverage their existing cable plant to cost-effectively deliver broadband community access and value-added services to a growing base of mobile subscribers.

ARRIS ZoneFlex 7761-CM is easily deployed across existing cable strands and seamlessly integrates with MSO backend management, CMTS and operational systems.

Specifications

| Physical Characteristics | |
|--|---|
| Power | Power by Cable Infrastructure (40-90 V) 40 to 90 VAC quasi-square wave, 47 to 63 Hz through 5/8" hardline connector |
| Power Draw | 10W standby mode 25W (with Heater and PoE output Disabled) 50W (with Heater and PoE output Enabled) |
| Physical Size | 16.3" (415 mm) L x 12" (305 mm) W x 11.5" (290 mm) H |
| Weight | 15 lbs (6.8 Kg) |
| Antenna | 2.4 GHz – Internal antenna array with directional and omni high-gain elements that provide over 4,000 unique antenna patterns 5 GHz – 3 external antenna connectors (5 GHz antennas are optional.) |
| Ethernet Ports | 1 port, auto MDX, auto-sensing RJ45 10/100 Mbps Power over Ethernet (802.3af) output |
| Environmental Conditions | IP-67 rated Operating air temperature: -40°C to 65° C (-40°F to 149°F) Shock and vibration: ETSI300-019-1-4 |
| Cable Modem Specifications | |
| Standard | DOCSIS 3.0 with 8 x 4 bonded channels Euro-DOCSIS 3.0 (optional) |
| Cable Modem Throughput | Up to 320 Mbps |
| Protection Circuits | IEC 60000-4-5 level 4 surge GR1089 – 6 kV (3000 A) surge |
| Performance and Supported Configurations | |
| Concurrent Clients | Up to 100/radio (200/AP) |
| Target UDP Throughput | Up to 50 Mbps sustained throughput over 500 feet to client devices |
| Traffic Management and Quality of Service | |
| Classes of Service | Voice, video, best effort and background |
| Software Queues | Four per station |
| 802.11e | Supported |
| Automatic Traffic Classification | Automatic type of service tagging for multicast video packets |
| Rate Limiting | Supported |
| VLAN Support | 802.1Q |
| Heuristic Classification | Supported |
| Management | |
| Configuration | Web user interface, CLI (Telnet), SSH HTTP/S, SNMP statistics interface |
| Statistics | LAN, wireless and associated stations (accessible via Web UI) |
| Auto AP Software Updates | FTP or TFTP, remote auto available |
| Management | FlexMaster Network Management or individually managed SNMP v3 |
| Wi-Fi* | |
| Standards | IEEE 802.11a/b/g/n 2.4 GHz and 5 GHz concurrent operation |
| Supported Data Rates | 802.11n: 6.5 Mbps – 130 Mbps (20 MHz) 6.5 Mbps – 270 Mbps (40 MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps 802.11b: 11, 5.5, 2 and 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps |
| Radio Chains | 3 x 3 |
| Spatial Streams | 2 |
| RF Power Output | 27 dBm/500 mW |
| Channelization | 20 MHz and/or 40 MHz |
| Frequency Band | IEEE 802.11n: 2.4 – 2.484 GHz and 5.15 – 5.85 GHz IEEE 802.11a: 5.15 – 5.85 GHz IEEE 802.11b: 2.4 – 2.484 GHz |
| Operating Channels | 2.4 GHz channels: US/Canada: 1-11, Europe (ETSI X30): 1-13 5 GHz channels: Country dependent for the following channel ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165 |
| BSSID | Up to eight per radio (16 total) |
| Power Save | Supported for client |
| Wireless Security | WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, 802.1x |
| Certifications | U.S. (in process) WEEE/RoHS compliance Wi-Fi Alliance Certification (Wi-Fi Certified™) (in process) DOCSIS 3.0 certification (in progress) |

ARRIS ZoneFlex™ 7761-CM

Ordering Information

| ARRIS # | Mfg # | Description |
|---------|-----------|---|
| TBD | TBD | ARRIS ZoneFlex 7761-CM strand mount centrally managed concurrent dual band 802.11n outdoor access point with DoCSIS cable modem |
| TBD | TBD | ARRIS ZoneFlex 7761-CM cabinet mount centrally managed concurrent dual band 802.11n outdoor access point with DoCSIS cable modem |
| TBD | TBD | ARRIS ZoneFlex 7761-CM-UN strand mount centrally managed concurrent dual band 802.11n outdoor access point with DoCSIS cable modem |
| TBD | TBD | ARRIS ZoneFlex 7761-CM-UN cabinet mount centrally managed concurrent dual band 802.11n outdoor access point with DoCSIS cable modem |
| TBD | TBD | ARRIS ZoneFlex 7761-CM-UN strand mount centrally managed concurrent dual band 802.11n outdoor access point with EuroDoCSIS cable modem |
| TBD | TBD | ARRIS ZoneFlex 7761-CM-UN cabinet mount centrally managed concurrent dual band 802.11n outdoor access point with EuroDoCSIS cable modem |
| TBD | TBD | Antenna; Vertical 5.5 dBi Omni 5.8 GHz Use with 795357 Strand Mount AP Vertically Polarized N Connector |
| TBD | TBD | Antenna; Horizontal 5.5 dBi Omni 5.8 GHz Use with 795357 Strand Mount AP Horizontally Polarized N Connector |
| TBD | TBD | Access Point; World Wide ZF-7761-CM Outdoor DOCSIS 3.0 Strand-Mount Dual-Band 802.11N/A/B/G 2.4/5.8GHZ - 40-90VAC Power - Incl 2.4GHZ Antenna & Brackets - 5.8GHZ EXT Antennas 795362 Not Incl - 1YR RTF Warranty |
| 794015 | SVC-CTRCT | 1 Year Service Contract Required |

Contact ARRIS: (888) 353-9473 www.arris.com

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