802.11AC AP WITH BEAMFLEX+ AND DIRECTIONAL COVERAGE FOR COST-EFFECTIVE DEPLOYMENTS IN HIGH DENSITY OUTDOOR VENUES

The T301 Series are designed explicitly for high density user environments such as stadiums, arenas, train stations, convention centers, and major metro areas.

The T301 Series has internal high gain directional antennas to provide directed coverage solutions eliminating the need for bulky panel antennas and confusing and expensive external RF cabling. The T301 Series enable focused Wi-Fi coverage to mitigate interference and implicitly improve signal-to-interference-plus-noise ratio (SINR) in the most challenging RF environments.

In addition, the T301 Series uniquely leverages a predictive model for channel selection (ChannelFly) that uses actual activity to learn what channels will yield the most capacity to provide the highest client speeds and reduced interference.

Designed for easy installation within an ultra lightweight and low profile enclosure, the T301 Series is ideal for venue owners looking to quickly and economically deploy Wi-Fi in high-capacity environments such as stadiums, arenas, train stations, convention centers, and major metro areas. Using directed coverage, the APs can be deployed in close proximity, mitigating co-channel interference. This is critical as high density deployments require a large number of APs within a fixed space.

The T301 Series can be centrally managed by the ZoneDirector Smart WLAN controller or the SmartCell™ Gateway 200 (SCG 200) as part of a unified indoor/outdoor wireless LAN, deployed as a standalone AP and managed individually, or through the FlexMaster remote Wi-Fi management system.
ZoneFlex T301
Entry-Level 802.11ac Outdoor Access Points with Directed Coverage

**FEATURES**

- Concurrent dual-band (5GHz/2.4GHz) support
- 1167 Mbps of total WLAN RF capacity
- BeamFlex+ adaptive antenna technology and advanced RF management
- Up to 10dB interference mitigation
- Optimized for high-density environments
- Polarization diversity for optimal mobile device performance
- IP-67 rated, -20°C to +65°C
- Adjustable bracket included
- Small, lightweight, and sleek form factor
- Standalone or centrally managed by ZoneDirector, SCG 200, or FlexMaster
- Dynamic, per-user rate-limiting for hotspot WLANs
- WPA-PSK (AES), 802.1X support for RADIUS and Active Directory
- BYOD, Zero-IT, and Dynamic PSK
- Captive portal and guest accounts
- Admission control/load balancing
- Band balancing
- Application recognition and control
- Secure HotSpot
- SPOT location services
- Intelligent Band steering
- Airtime fairness
- SmartMesh
- Smart QoS

**ZONEFLEX T301N**

**DUAL-BAND 802.11AC 2:2X2, 1167 MBPS**
Internal narrow beam antenna for 2.4GHz and 5GHz, 30° narrow sector coverage

- Well suited to extremely high-density deployments
- Best coverage and capacity at 30° x 30°

**ZONEFLEX T301S**

**DUAL-BAND 802.11AC 2:2X2, 1167 MBPS**
Internal sector adaptive antenna for 2.4GHz and 5GHz, 120° sector coverage

- Well suited to high-density deployments
- Best coverage and capacity at 120° x 30°

**Specifications**

- **Dimensions**
  - ZoneFlex T301N: 19.5 cm / 7.6”
  - ZoneFlex T301S: 23.9 cm / 9.4”
  - Weight: 1 kg / 2.1 lbs

- **Power**
  - 802.3af Power over Ethernet (PoE)

- **Antennas**
  - Integrated Adaptive Antennas

- **Mounting**
  - Two-way fully adjustable mounting bracket

- **Ventilation**
  - Protective vent to equalize pressure

**Note:** N model supports PD-MRC only

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**ZoneFlex T301**
Entry-Level 802.11ac Outdoor Access Points with Directed Coverage

### PHYSICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th><strong>Power</strong></th>
<th>802.3af PoE Input (Class 3 PD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Size</strong></td>
<td>9.4” x 7.6” x 4.3” (23.9cm x 19.5cm x 11.0cm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>5.5 lbs (2.5 kg) with adjustable bracket</td>
</tr>
<tr>
<td><strong>Ethernet Ports</strong></td>
<td>10/100/1000Base-T 802.3af, 802.3ab, 802.3af PoE PD Input, Jumbo frame support (2290 byte max MTU)</td>
</tr>
<tr>
<td><strong>Mounting Options</strong></td>
<td>Wall Mount, Pole Mount Diameter 1” to 2.5”</td>
</tr>
<tr>
<td><strong>Environmental Conditions</strong></td>
<td>Operating temperature range -20°C to +65° C, Weather protection: IP67 per IEC 60529</td>
</tr>
<tr>
<td><strong>Power Draw</strong></td>
<td>PoE Input, Idle: 6.5W, Typical: 7.5W, Peak: 11W</td>
</tr>
</tbody>
</table>

### DESCRIPTION

- **Frequency Bands**
  - 5 GHz 802.11ac
  - 2GHz 802.11g/n
- **Standards**
  - IEEE 802.11g/n 2.4-2.472GHz (ch-13 CE, ch-11 US)
  - IEEE 802.11ac 5GHz
  - U-NII-1 5.15-5.25GHz
  - U-NII-2 5.25-5.35 (DFS)
  - U-NII-2B 5.37-5.47
  - U-NII-2C 5.47-5.725 (DFS)
  - U-NII-3 5.725-5.825
  - ISM 5.725-5.875
  - U-NII-4 5.85-5.925

### PERFORMANCE AND CAPACITY

- **Certification**
  - U.S., Europe, Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Taiwan

### PRODUCT ORDERING INFORMATION

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ZoneFlex T301</strong> Outdoor APs</td>
<td></td>
</tr>
<tr>
<td>901-T301-XX61</td>
<td>ZoneFlex T301n, 30x30 deg. Outdoor 802.11ac 2x2:2, narrow sector, dual band concurrent access point, one ethernet port, PoE input includes adjustable mounting bracket and one year warranty. Does not include PoE injector.</td>
</tr>
<tr>
<td>901-T301-XX51</td>
<td>ZoneFlex T301s, 120x30 deg. Outdoor 802.11ac 2x2:2, dual band concurrent access point, one ethernet port, PoE input includes adjustable mounting bracket and one year warranty. Does not include PoE injector.</td>
</tr>
</tbody>
</table>

### Optional Accessories

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>902-0162-XXYY</td>
<td>Universal secure mounting bracket fits multiple ZoneFlex APs including T301. Mounts to Hard Wall, Ceiling, Pole &amp; Truss. Fits without pad-lock support</td>
</tr>
<tr>
<td>902-0180-XX00</td>
<td>PS-220 of Power over Ethernet (PoE) Injector (10/100/1000 Mbps), 60W 120-240Vac, quantity of 1 unit (T300/T301, 7762-series, 7782-series, and 8800-S access points)</td>
</tr>
</tbody>
</table>

**Certifications**

- **Transportation**
  - STA 2A
  - Random Vibration & Drop Test
  - Compression & Loose Cargo Test
  - ETSI EN 300 099-2-2 Specification T 2.2

- **Safety**
  - Safety Listing – EU
  - EN 60950-1:2006/A12:2011
  - International
  - CB Scheme Certificate
  - CB Bulletin
  - IEC 60950-1: 2005 Second Edition
  - CISPR 22
  - CISPR 24
  - EN 60950-1:2005/A12:2011
  - EN 60950-1:2005/A12:2011
  - EN 60950-1:2005/A12:2011

- **Health And Human Safety To Rf Exposure**
  - EN 62209-2008
  - EN 50385:2002
  - FCC OET-65
  - ICNIRP:2010

- **Hazardous Materials**
  - RoHS Directive 2002/95/EC
  - RoHS Directive 2011/65/EU
  - WEEE

- **Immunity**
  - EN61000-4-2 Level 4 Contact / Level 3 Air
  - EN61000-4-3 Level 4 EMC Immunity
  - EN61000-4-5 Level 1 & 2 AC Surge Immunity
  - EN61000-4-11 Level 3 ESD Immunity
  - EN61000-4-14 Level 3 Radiated Immunity
  - EN61000-4-28 Immunity

- **Railway And Rolling Stock**
  - EN50555
  - EN50121 EMC
  - EN50214-1 Immunity
  - EN6373 Shock & Vibration

- **Wi-Fi Alliance**
  - Wi-Fi CERTIFIED™ a, b, g, n, ac
  - WPA™ — Enterprise, Personal
  - WPA2™ — Enterprise, Personal
  - Optimization — WMW+**

**Certification**

- **Random Vibration & Drop Test**
- **Compression & Loose Cargo Test**

**PERFORMANCE AND CAPACITY**

- **Physical Layer Modulation Data Rate**
  - 2.4GHz 802.11b/g/n 300Mbps
  - 5GHz 802.11a/n/ac 867Mbps

**Concurrent Stations**

- **Up to 512 clients per AP**

**Simultaneous VoIP Clients**

- **Up to 30**

**Certification**

- **For access points, **-Z2 applies to the following countries: Algeria, Egypt, Israel, Morocco, Tunisia, and Vietnam

**PLEASE NOTE:** When ordering ZoneFlex outdoor APs, you must specify the destination region by indicating -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must indicate -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must indicate -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must indicate -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must indicate -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must indicate -US, -WW, or -Z2 instead of XX.

1 Max power varies by country setting, band, and MCS rate
2 BeamFlex gains are statistical system-level effects (including TxBF), translated to enhanced SNR based on observations over time in real-world conditions with multiple APs and many clients
3 Tx sensitivity varies by band, channel width, and MCS rate
4 Refer to price list for current country certifications
5 With future software release

**PRODUCT ORDERING INFORMATION**

- **MODEL**
  - **ZooneFlex T301**
  - **T301n**
  - **T301s**

- **DESCRIPTION**
  - **Outdoor 802.11ac 2x2:2, narrow sector, dual band concurrent access point, one ethernet port, PoE input includes adjustable mounting bracket and one year warranty. Does not include PoE injector.**

- **Optional Accessories**
  - **Universal secure mounting bracket fits multiple ZoneFlex APs including T301. Mounts to Hard Wall, Ceiling, Pole & Truss. Fits without pad-lock support.**

- **Power Specifications**
  - Power: 802.3af PoE Input (Class 3 PD)
  - Physical Size: 9.4” x 7.6” x 4.3” (23.9cm x 19.5cm x 11.0cm)
  - Weight: 5.5 lbs (2.5 kg) with adjustable bracket
  - Ethernet Ports: 10/100/1000Base-T 802.3af, 802.3ab, 802.3af PoE PD Input, Jumbo frame support (2290 byte max MTU)
  - Mounting Options: Wall Mount, Pole Mount Diameter 1” to 2.5”
  - Environmental Conditions: Operating temperature range -20°C to +65° C, Weather protection: IP67 per IEC 60529

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