

ADTRAN

# 2030/2035

## Dual Radio 802.11ac Access Point



Low TCO



Zero-Touch



Gigabit



Wi-Fi



Open



SDN Enabled

## Benefits

- Offers 100 percent cloud-managed Wi-Fi without required subscriptions
- Provides integrated wireless intrusion detection system to proactively identify rogue access points and wireless attacks
- Greatly improves network performance with flexible concurrent dual-band Wi-Fi
- Supports zero-touch AP provisioning and zero IT setup in five minute or less
- Leverages machine learning-powered, self-optimizing, and healing technology
- Supports context-aware security and firewall for the highest level of security at the edge
- Offers seamless feature and service upgrades to match your unique needs and budget
- Supports WMM/802.11e and QoS for enterprise-class voice over Wi-Fi
- Scale from a handful of APs to thousands across multiple locations and customers

## Overview

**ADTRAN's wireless portfolio includes a family of 802.11n and 802.11ac high-performance Access Points (APs) that are a perfect fit for enterprises of all sizes. This includes educational institutions, retail, hospitality, and healthcare providers who are looking to move their organizations to a pervasive mobility environment.** ADTRAN APs are completely plug-and-play requiring no manual configuration and deliver optimal performance. Whether you want to add wireless to your office or deploy it across an entire campus, ADTRAN APs are designed to meet your needs.

### High-Performance, Reliable Connectivity

The ADTRAN 2030 and 2035 indoor 802.11ac APs offer enterprise-class performance with three transmit and three receive streams providing data rates up to 1.3 Gbps on the 5 GHz radio and 450 Mbps on the 2.4 GHz radio for a total of 1.75 Gbps. The ADTRAN 2030 AP includes six MIMO internal antennas with up to 5.5 dBi gain on the 5 GHz and 4 dBi gain on the 2.4 GHz. The ADTRAN 2035 AP includes six RP-SMA connectors for external antennas.

The ADTRAN 2030 and 2035 APs provide high performance, reliable coverage in ultra-high density wireless environments such as indoor arenas, conference centers, libraries, and other

high-traffic areas. The ADTRAN 2030 Series APs support the newer generation of laptops with three stream radio support, and offer higher receive sensitivity on both the 2.4 GHz and 5 GHz radios to compensate for Bring Your Own Device (BYOD) mobile devices such as smartphones and tablets that have a fraction of the transmit power of traditional laptops.

The ADTRAN 2030 and 2035 APs are fully functional with the power delivered by a single-port 802.3af PoE solution.

### Flexible, Cloud-Managed Options

ADTRAN Enterprise-Class APs offer simple, robust, adaptable enterprise Wi-Fi connectivity and security without compromise. With ADTRAN Express, every AP is a starting point – enabling you to think big and start small. Leverage the power and simplicity of 100 percent cloud-managed Wi-Fi, “right sized”, without required subscriptions. Combine that with high-performance, enterprise-class APs available at market-disruptive pricing and machine-learning-powered, self-organizing and healing technology—allowing you to get the network up and running quickly, keep it running smoothly and ensuring the best possible quality of experience.

Scale from a handful of APs to thousands across multiple locations and customers. Seamlessly upgrade to elevate the experience with Enhanced Support or upgrade to ADTRAN Elite which includes advanced features and unparalleled flexibility in deployment options. With ADTRAN enterprise-class Wi-Fi solutions, you can create an experience to best fit the unique needs and budget of your organization.



# ADTRAN 2030/2035

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## ADTRAN Express

### 100 Percent Cloud-Managed IT

- No required subscriptions or licences
- No installation or management of on-premises controller or software

### Powerful Enterprise-Class APs

- Available at market disruptive pricing 75 percent lower than typical enterprise-class APs and licences

### Deployments Made Simple

- **Zero-Touch AP Provisioning**
  - ◆ APs automatically discover the cloud, download firmware, and configuration.
- **ZeroIT Setup**
  - ◆ Enjoy a fully functional employee and guest network in 5 minutes or less with just a few wizard driven key strokes and mouse clicks
- **Machine learning-powered Wi-Fi that just works**
  - ◆ Self-optimizing and healing technology
  - ◆ DynamicRF - Maximizes performance and adapts to interference by learning about the RF spectrum and automatically adjusting optimal radio settings
  - ◆ DynamicSteering - Automatically steers clients to the best AP or radio within an AP to provide the best possible quality of experience, provides load balancing and prevents “sticky Wi-Fi clients”
  - ◆ DynamicMulticast - Prevents multicast traffic typically sent at low data rates from impacting overall performance by learning about traffic patterns and automatically adjusting optimal multicast settings

### Unmatched Visibility and Insight

- Web-based HTML 5 admin interface enables centralized management of the WLAN from any device, anywhere in the world
- Multi-tenanted tiered admin access allows support of multiple customers or sites on a single instance and provides administrators with permissions to just those sites and the resources within them
- Customizable dashboard branding (logo/colors)
- Real-time and historical reporting and analytics dashboards
- Complete RESTful web services API for automation, orchestration and analytics

### A Right-Sized Feature Set

- Focused on robust enterprise connectivity and security
- Seamless upgrades to ADTRAN Elite features and flexible deployment options

### Context-Aware Security and Firewall

- Role-Based Access Control with L7 Device Fingerprinting allows you to define group policies based on multiple contexts including user credentials, device type, ownership of device (company owned or BYOD), location and schedule

## Seamless Layer 2 Mobility

### Every AP is a Starting Point

- Scale from a handful of APs to thousands across multiple locations and customers

### Remote Site Survivability

- APs continue to function if the connection to the ADTRAN cloud goes down

### Interactive Support Community

- Optional upgrades to enhanced support and extended warranty with advanced hardware replacement

## ADTRAN Elite

### Everything in Express +

- Includes everything in ADTRAN Express plus more

### Advanced Features

- Advanced Guest Manager
- Advanced authentication methods
- Wireless Intrusion Detection (W-IDS)
- Heatmaps for RF planning and rogue AP location tracking
- Seamless Layer 3 mobility

### Flexible Deployment Options

- ADTRAN cloud or yours

### Enhanced Support and Extended Warranty

- Cloud and Support SLAs
- Advanced hardware replacement

## Product Specifications

### Interfaces

- One Auto-sensing, 10/100/1000Base-T, Serial Console Port, RJ-45 Connector

### Antenna

- **Bluesocket 2030:** Six Internal MIMO Antennas with 5.5dBi Gain
- **Bluesocket 2035:** Six External RP-SMA Connectors

### Radios

- 802.11a/n and 802.11b/g/n
- Configurable for Sensor-mode RF Scanning
- DynamicRF (Radio Resource Management) for Automatic Channel, TX Power and Neighbor Discovery
- DynamicSteering (Band/client steering, load balancing and sticky client prevention technology) with 802.11k/v support

# Dual Radio 802.11ac Indoor Access Point

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- Configurable Maximum Associated Clients per Radio
- Multicast/Broadcast to Unicast Conversion
- A-MPDU and A-MSDU Frame Aggregation
- HT20, HT40 (High Throughput) and VHT80 (Very High Throughput)
- \*Max Aggregate TX Power
  - ◆ 2.4Ghz: 24 dBm/250 mW
  - ◆ 5Ghz: 26 dBm/400 mW

## Certifications

- Wi-Fi 802.11a/b/g/n/ac Certification

## Mobility Services

- Eight SSIDs Per Radio
- Support for Apple Bonjour-based Services (Airprint, Air-play), Apple CNA, and Microsoft NCSI
- Wireless Client Load Balancing
- Secure Fast Roaming with Opportunistic Key Caching (OKC)
- Seamless Layer 2 and Layer 3 Roaming
- High Availability
- Soft GRE tunneling
- 802.1Q VLAN Support

## QoS for Voice, Data, and Video

- Smart Bandwidth Management (Incoming, Outgoing)
- WMM (802.11e)
- 802.1p or Differentiated Service Code Point (DSCP)
- WMM Power Save (U-APSD)

## Security

- 802.1X Port-based Authentication
- Open System (WEP-64/128)
- Shared System (WEP-64/128)
- WPA/WPA2-Personal
- WPA/WPA2-Enterprise
- EAP-TTLS
- EAP-PEAP
- EAP-FAST
- EAP-TLS
- EAP-SIM
- EAP-AKA

## Environment

- **Operating:** 32° F to 104° F (0° C to 40° C)
- **Storage:** 40° F to 158° F (-40° C to 70° C)
- **Humidity:** 5% to 90% Typical

## Physical

### Bluesocket 2030 AP

- **Dimensions:** 6.5 in. x 6.5 in. x 1.5 in. (W x D x H)  
(165 mm x 165 mm x 35 mm)
- **Weight:** 1.25 lbs (0.6 kg)

### Bluesocket 2035 AP

- **Dimensions:** 6.5 in. x 6.5 in. x 1.5 in. (W x D x H)  
(165 mm x 165 mm x 35 mm)
- **Weight:** 1.25 lbs (0.6 kg)

## Power

- 802.3af Compliant Power over Ethernet
- External 12V DC Power Adapter (Optional)

## Mounting

- Wall/Ceiling/T-bar Mount Kit Included
- Plenum Rated
- **Anti-Theft:** Compatible with Kensington-style Locks

## Agency Approvals

### Electrical/Safety Compliance

- UL 1950
- CSA 22.2
- IEC 60950
- EN 60950

## Radio Approvals

- FCC Part 15.247
- RSS-210 (Canada)
- EN 300.328 (Europe)
- AS/NZS 4771 (Australia & New Zealand)
- NCC (Taiwan) and IDA (Singapore)
- EMI and Susceptibility (Class A)
- FCC Part 15.107 and 15.109
- ICES-003 (Canada)
- EN 301.489-1 and -17 (Europe)
- AS/NZS 3548

## Warranty

- Limited Lifetime Warranty

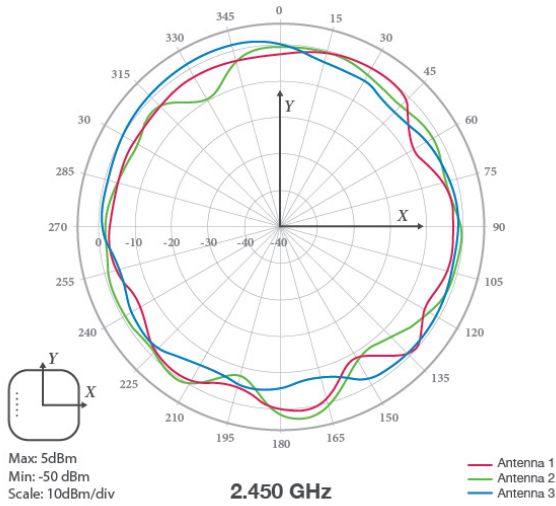
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\* Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.

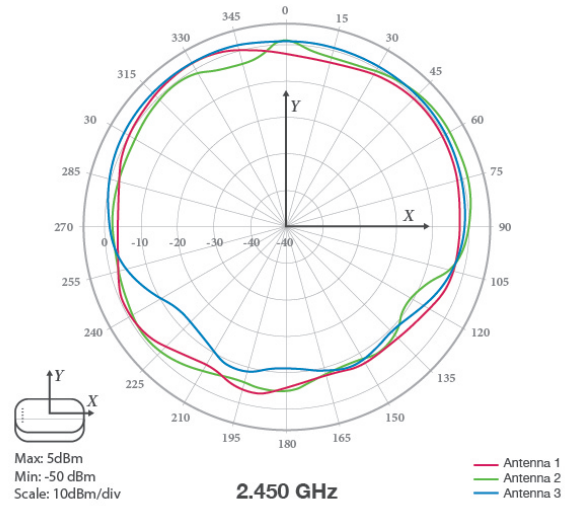
# ADTRAN 2030/2035

## Antenna Patterns

### BSAP 2030 – 2.4 GHz (5 dBi)

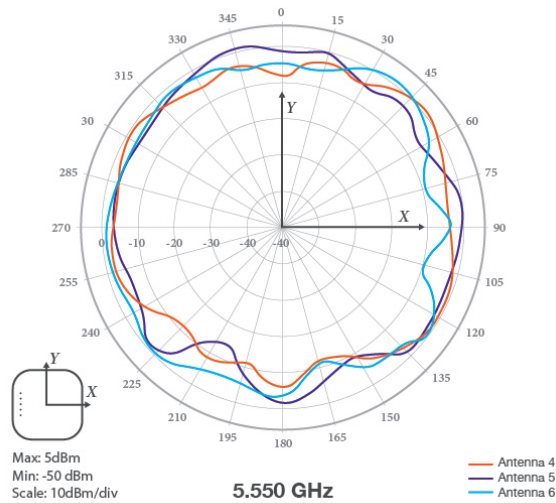


Horizontal or Azimuth (Top View)

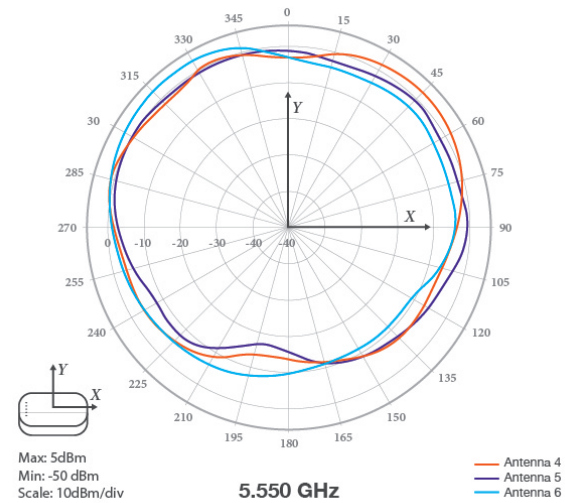


Elevation (Side View)

### BSAP 2030 – 5 GHz (6 dBi)



Horizontal or Azimuth (Top View)



Elevation (Side View)

# Dual Radio 802.11ac Indoor Access Point

## Power and Sensitivity Tables

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)
	*	**	
<b>802.11b 2.4 GHz</b>			
1 Mbps	24 dBm	22 dBm	-93 dBm
11 Mbps	24 dBm	22 dBm	-90 dBm
<b>802.11g 2.4 GHz</b>			
6 Mbps	24 dBm	22 dBm	-92 dBm
54 Mbps	21 dBm	19 dBm	-76 dBm
<b>802.11n 2.4 GHz HT20</b>			
MCS0	23 dBm	21 dBm	-90 dBm
MCS1	23 dBm	21 dBm	
MCS2	23 dBm	21 dBm	
MCS3	23 dBm	21 dBm	
MCS4	21 dBm	19 dBm	
MCS5	21 dBm	19 dBm	
MCS6	20 dBm	18 dBm	
MCS7	20 dBm	18 dBm	-73 dBm
MCS8	23 dBm	21 dBm	
MCS9	23 dBm	21 dBm	
MCS10	23 dBm	21 dBm	
MCS11	23 dBm	21 dBm	
MCS12	21 dBm	19 dBm	
MCS13	21 dBm	19 dBm	
MCS14	20 dBm	18 dBm	
MCS15	20 dBm	18 dBm	
MCS16	23 dBm	21 dBm	
MCS17	23 dBm	21 dBm	
MCS18	23 dBm	21 dBm	
MCS19	23 dBm	21 dBm	
MCS20	21 dBm	19 dBm	
MCS21	21 dBm	19 dBm	
MCS22	20 dBm	18 dBm	
MCS23	20 dBm	18 dBm	

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)
	*	**	
<b>802.11n 2.4 GHz HT40</b>			
MCS0	22 dBm	20 dBm	-88 dBm
MCS1	22 dBm	20 dBm	
MCS2	22 dBm	20 dBm	
MCS3	22 dBm	20 dBm	
MCS4	20 dBm	18 dBm	
MCS5	20 dBm	18 dBm	
MCS6	19 dBm	17 dBm	
MCS7	19 dBm	17 dBm	-70 dBm
MCS8	22 dBm	20 dBm	
MCS9	22 dBm	20 dBm	
MCS10	22 dBm	20 dBm	
MCS11	22 dBm	20 dBm	
MCS12	20 dBm	18 dBm	
MCS13	20 dBm	18 dBm	
MCS14	19 dBm	17 dBm	
MCS15	14 dBm	17 dBm	
MCS16	22 dBm	20 dBm	
MCS17	22 dBm	20 dBm	
MCS18	22 dBm	20 dBm	
MCS19	22 dBm	20 dBm	
MCS20	20 dBm	18 dBm	
MCS21	20 dBm	18 dBm	
MCS22	19 dBm	17 dBm	
MCS23	19 dBm	17 dBm	
MCS20	21 dBm	19 dBm	
MCS21	21 dBm	19 dBm	
MCS22	20 dBm	18 dBm	
MCS23	20 dBm	18 dBm	

\* Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may be limited by operating at 802.3af, local regulatory domains (country) and band edge requirements.

\*\* Operating at 802.3af PoE

# ADTRAN 2030/2035

## Power and Sensitivity Tables

	Max TX Power*		Receive Sensitivity (Aggregate of Chains)
	*	**	
<b>802.11a 5 GHz</b>			
6 Mbps	26 dBm	24dBm	-89 dBm
54 Mbps	22 dBm	20 dBm	-76 dBm
<b>802.11n/ac 5 GHz HT20</b>			
MCS0	25 dBm	23 dBm	-92 dBm
MCS1	25 dBm	23 dBm	-88 dBm
MCS2	25 dBm	23 dBm	-88 dBm
MCS3	24 dBm	22 dBm	-85 dBm
MCS4	24 dBm	22 dBm	
MCS5	23 dBm	21 dBm	-83 dBm
MCS6	22 dBm	20 dBm	
MCS7	21 dBm	19 dBm	-73 dBm
MCS8	20 dBm	18 dBm	-68 dBm
MCS9	NA	NA	N/A
<b>802.11n/ac 5 GHz HT40</b>			
MCS0	23 dBm	21 dBm	-91 dBm
MCS1	23 dBm	21 dBm	-85 dBm
MCS2	23 dBm	21 dBm	-85 dBm
MCS3	23 dBm	21 dBm	-80 dBm
MCS4	23 dBm	21 dBm	
MCS5	22 dBm	20 dBm	-76 dBm
MCS6	21 dBm	19 dBm	
MCS7	20 dBm	18 dBm	-71 dBm
MCS8	19 dBm	17 dBm	-67 dBm
MCS9	19 dBm	17 dBm	-66 dBm
<b>802.11ac 5 GHz VHT80</b>			
MCS0	23 dBm	21 dBm	-89 dBm
MCS1	23 dBm	21 dBm	-84 dBm
MCS2	23 dBm	21 dBm	-84 dBm
MCS3	23 dBm	21 dBm	-79 dBm
MCS4	23 dBm	21 dBm	
MCS5	22 dBm	20 dBm	-75 dBm
MCS6	21 dBm	19 dBm	
MCS7	20 dBm	18 dBm	-68 dBm
MCS8	19 dBm	17 dBm	-65 dBm
MCS9	19 dBm	17 dBm	-63 dBm

\* Aggregate of chains operating at 802.3at PoE or AC/DC power adapter. Max TX power may belimited by operating at 802.3af, local regulatory domains (country) and band edge requirements.

\*\* Operating at 802.3af PoE

# Dual Radio 802.11ac Indoor Access Point

## Ordering Information

### 1. Choose Your Access Point

Equipment	Part No.
ADTRAN BSAP 2030: 802.11a/b/g/n/ac, 3x3:3, six internal MIMO antennas	1700948F1
ADTRAN BSAP 2035: 802.11a/b/g/n/ac, 3x3:3, six external RP-SMA connectors	1700949F1

### 2. Choose Your Accessories

Equipment	Part No.
802.3af Compliant PoE Injector for ADTRAN BSAP 2030/2035	1700926F1
AC/DC Power Adapter for ADTRAN BSAP 2030/2035	1700929F1
Omnidirectional Antenna Bundle with 5 dBi gain for ADTRAN BSAP 2035	1700957F1
Dual Band High Density Antenna Bundle with 13/7 dBi gain (2.4/5GHz respectively) for BSAP 2035	1700983F1

### 3. Upgrade to Enhanced Support/Extended Warranty

Warranty Option	Part No.
<b>Phone Support</b>	
ProCare One-Year Basic Maintenance for one Access Point for use with Elite On-Premises Perpetual Licence or upgrading Express Cloud from community support.	1100AMWIF1M1T1
ProCare Three-Year Basic Maintenance for one Access Point for use with Elite On-Premises Perpetual Licence or upgrading Express Cloud from community support.	1100AMWIF1M1T3
<b>Phone Support and Advanced Hardware Replacement</b>	
ProCare One-Year NBD Remote Maintenance for one Access Point for use with Elite On-Premises Perpetual Licence or upgrading Express Cloud from community support. Includes support and next business day advanced hardware replacement.	1100AMWIF1M2T1
ProCare Three-Year NBD Remote Maintenance for one Access Point for use with Elite On-Premises Perpetual Licence or upgrading Express Cloud from community support. Includes support and next business day advanced hardware replacement.	1100AMWIF1M2T3

### 4. Upgrade to Elite

Elite Option	Part No.
<b>Elite Cloud</b>	
Elite One-Year Subscription for one Access Point. Includes: Elite Cloud, ProCare Support, software/firmware updates, next business day advanced hardware replacement	1100MSPH200112
Elite Three-Year Subscription for one Access Point. Includes: Elite Cloud, ProCare Support, software/firmware updates, next business day advanced hardware replacement	1100MSPH200136
Elite Five-Year Subscription for one Access Point. Includes: Elite Cloud, ProCare Support, software/firmware updates, next business day advanced hardware replacement	1100MSPH200160
<b>Elite On-Premises (Requires ProCare Support from Step 2 above)</b>	
Elite On-Premises Perpetual Licence for on Access Point. Requires ProCare support.	1951901G1



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#### 6170094xF1-8I

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