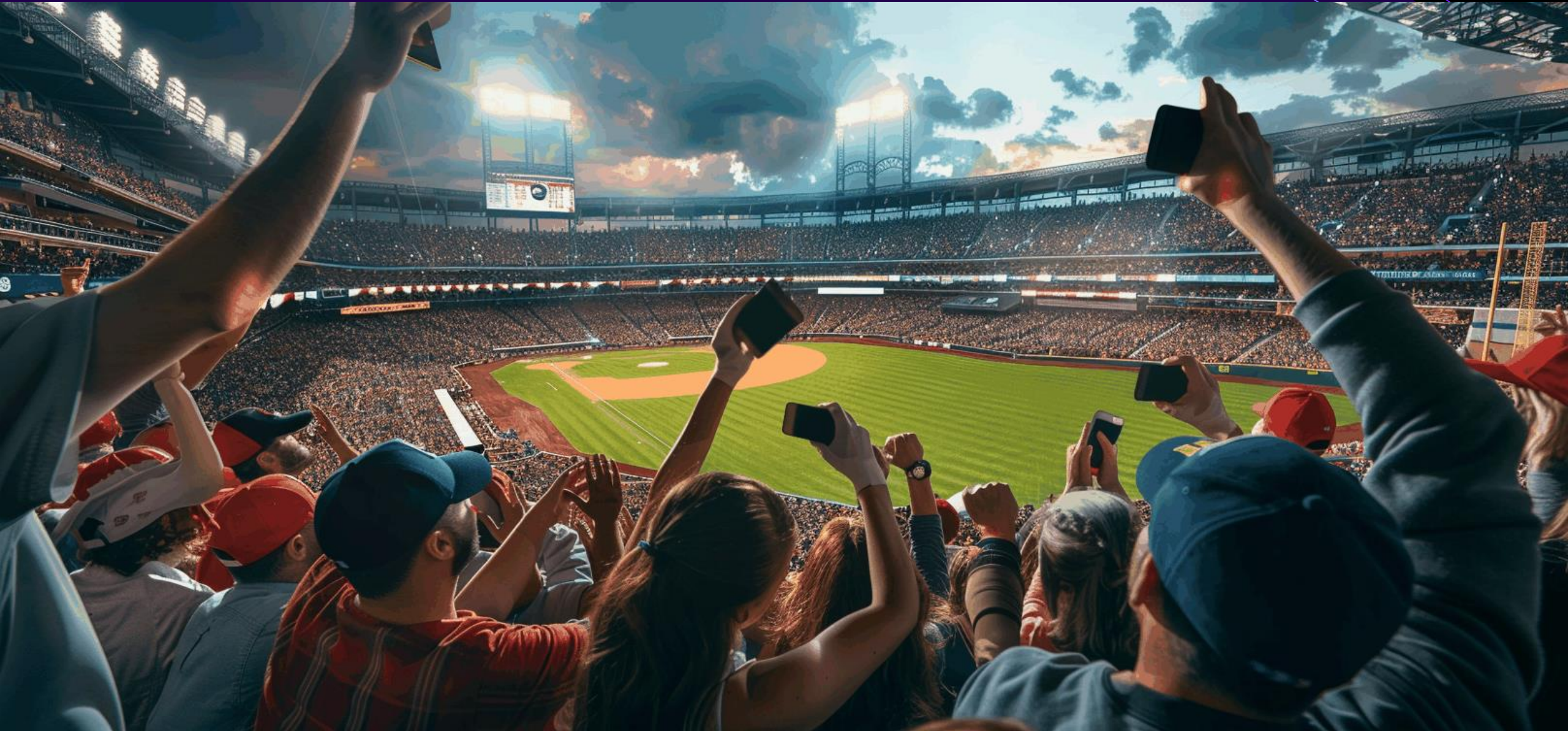


Stadium Wi-Fi

Introducing: Extreme Multi-Beam Wireless

Art of Stadium Wi-Fi



Current and Upcoming Venue Deployments



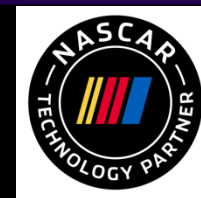
Arizona Cardinals
Atlanta Falcons
Baltimore Ravens*
Buffalo Bills*
Carolina Panthers
Chicago Bears
Cincinnati Bengals
Cleveland Browns
Denver Broncos
Detroit Lions
Green Bay Packers*
Houston Texans*
Indianapolis Colts*
Jacksonville Jaguars*
Kansas City Chiefs
Las Vegas Raiders
Los Angeles Chargers
Los Angeles Rams
Miami Dolphins*
Minnesota Vikings
New England Patriots*
New Orleans Saints*
New York Giants*
New York Jets*
Philadelphia Eagles*
Pittsburgh Steelers*
San Francisco 49ers
Seattle Seahawks*
Tampa Bay Buccaneers*
Tennessee Titans*
Washington Commanders



Arizona Diamondbacks*
Atlanta Braves
Baltimore Orioles*
Boston Red Sox*
Chicago Cubs*
Chicago White Sox*
Cincinnati Reds*
Cleveland Guardians*
Colorado Rockies
Detroit Tigers*
Houston Astros*
Kansas City Royals*
Los Angeles Dodgers
Los Angeles Angels
Miami Marlins*
Milwaukee Brewers
Minnesota Twins
New York Mets*
New York Yankees
Oakland Athletics
Philadelphia Phillies*
Pittsburgh Pirates*
San Diego Padres*
San Francisco Giants
Seattle Mariners*
St. Louis Cardinals*
Tampa Bay Rays
Texas Rangers
Toronto Blue Jays
Washington Nationals*



Anaheim Ducks*
Arizona Coyotes
Boston Bruins
Buffalo Sabres*
Calgary Flames
Carolina Hurricanes*
Chicago Blackhawks
Colorado Avalanche*
Columbus Blue Jackets
Dallas Stars
Detroit Red Wings
Edmonton Oilers
Florida Panthers
Los Angeles Kings
Minnesota Wild
Montreal Canadiens*
Nashville Predators
New Jersey Devils
New York Islanders
New York Rangers
Ottawa Senators
Philadelphia Flyers
Pittsburgh Penguins
San Jose Sharks
Seattle Kraken
St. Louis Blues
Tampa Bay Lightning
Toronto Maple Leafs
Vancouver Canucks
Vegas Golden Knights
Washington Capitals
Winnipeg Jets



Darlington Raceway*
Martinsville Speedway*
Daytona International Speedway*
Talladega Superspeedway*
Auto Club Speedway*
Homestead-Miami Speedway*
Kansas Speedway*
Michigan International Speedway*
Phoenix Speedway*
Richmond International Speedway*
Watkins Glen International*



San Jose Earthquakes*
Colorado Springs Switchbacks*
Houston Dynamo*
New England Revolution*
Seattle Sounders*

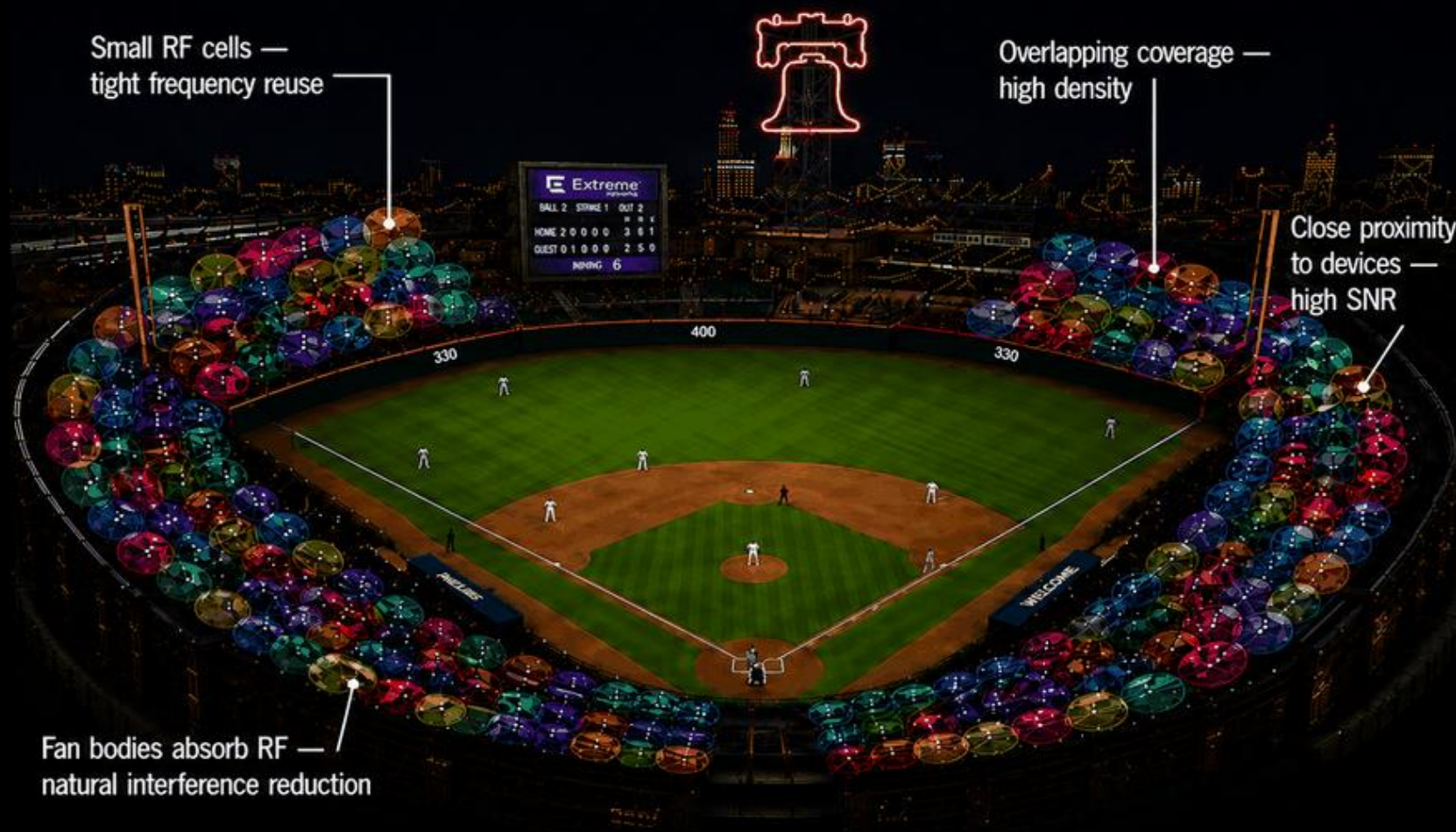


Brigham Young University*
University of Southern California*
University of Florida*
University of Pittsburgh
Baylor University*
Stanford University*
Middle Tennessee State University*
University of Texas – Moody Center*
Penn State
West Texas A & M*
Mississippi State
Virginia Tech
Auburn University*



* Fully Deployed Extreme Wi-Fi

Beneath the Bleachers— Underseat AP Design



AP5060U — Under-Seat Access Point

PROS

- ✓ Closest possible proximity to fan devices
- ✓ Excellent frequency reuse — small, dense cells
- ✓ Human bodies act as natural RF absorbers
- ✓ Proven at stadium scale — 1,500+ APs per venue

CONS

- ✗ Cabling requires conduit in concrete — retrofit is expensive
- ✗ Cannot cover field level, floor seating, or concert GA
- ✗ Retractable seating complicates deployment



Tight RF Cells —
Optimized for High-Density Seating



High Density
Overlap

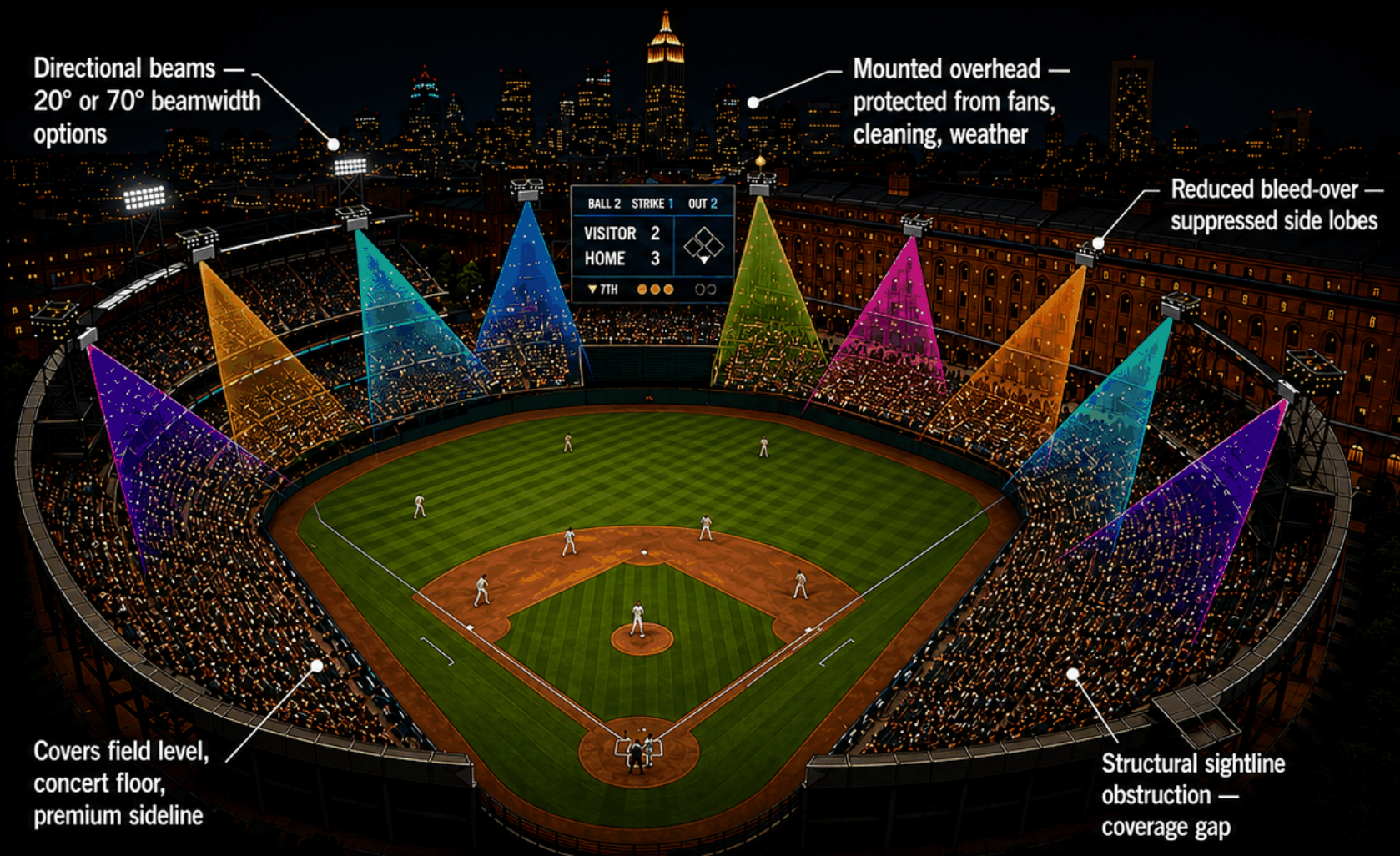


Maximum Reuse —
Minimal Interference



Designed Around
The Fan

Painting the Corners — Coverage from Overhead



AP5060D — Directional Access Point
Configurable beamwidth: 20° or 70°

PROS

- ✓ Versatile mounting options — catwalk, handrail, wall, enclosure, or overhead infrastructure
- ✓ Covers field level, concert floor, and premium seating
- ✓ No retractable seating issues — APs stay in fixed positions
- ✓ Configurable 20° or 70° beamwidth — precision coverage per section

CONS

- ✗ Greater throw distance to clients
- ✗ Traditionally less frequency reuse than underseat
- ✗ Requires clear sightlines — structural obstructions create shadows
- ✗ Potential hidden node issues — clients in the same beam can't hear each other, increasing contention



Focused Directional Beams — 20° or 70°



Overhead Mounting — Protected Infrastructure

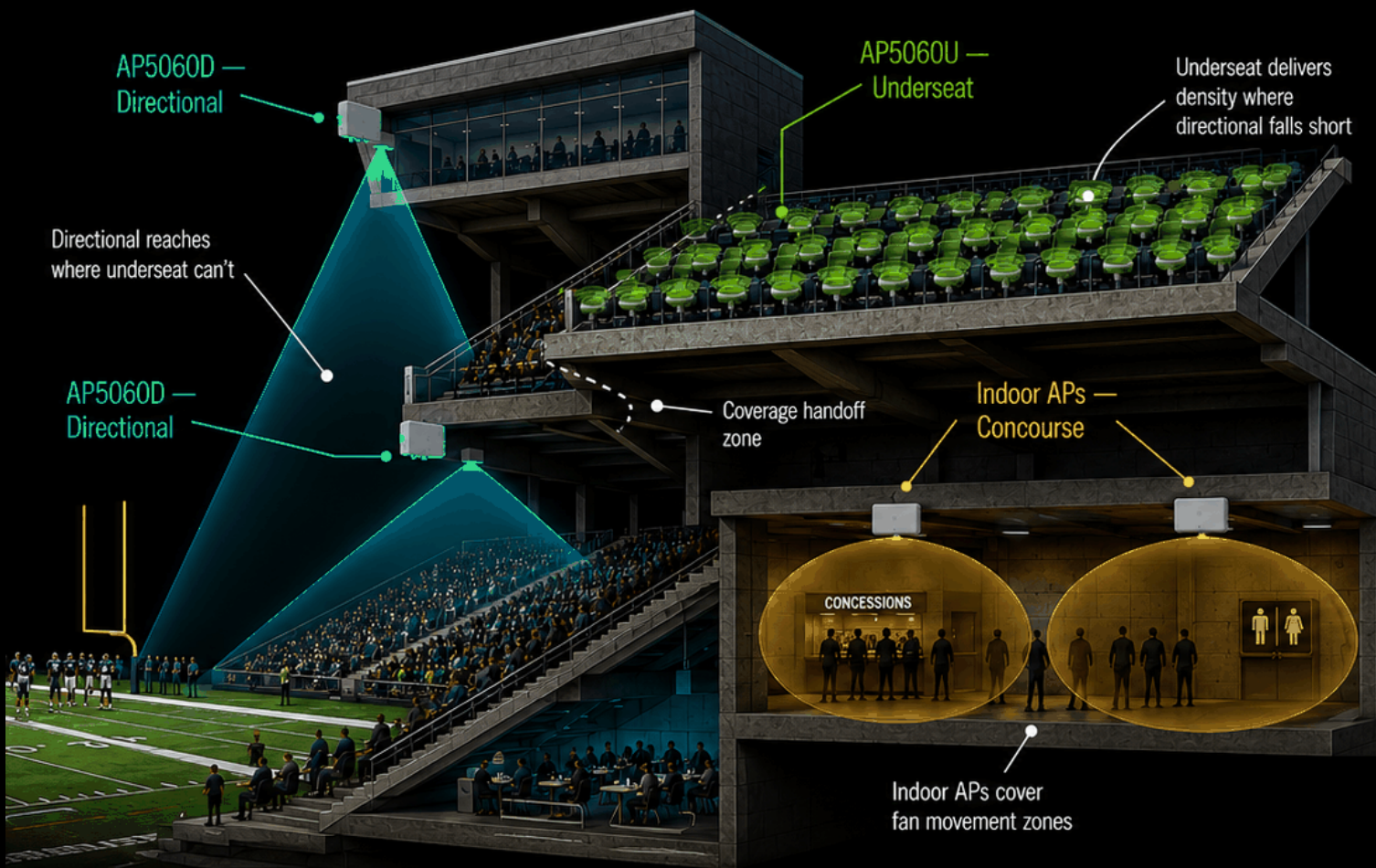


Full Venue Coverage — Including Field Level

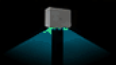


Precision RF Control — Minimal Bleed-Over

The Complete Game Plan — Hybrid AP Design



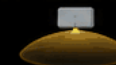
The best stadium networks aren't underseat or directional — they're both. Deploy each where it wins.



Cyan = Directional (AP5060D)

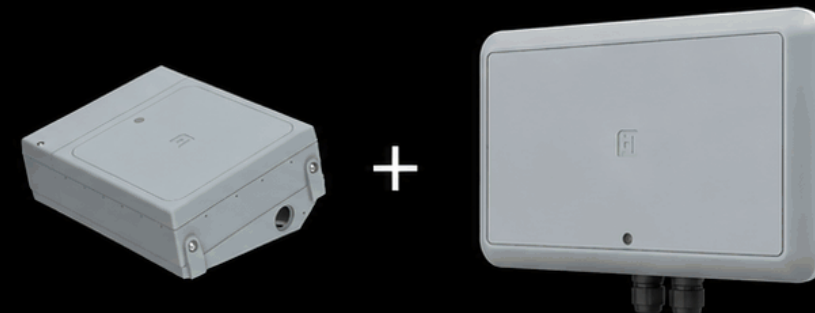


Green = Underseat (AP5060U)



Amber = Indoor / Concourse

WHY HYBRID WINS



AP5060U + AP5060D — each deployed where it performs best

THE HYBRID ADVANTAGE:

- ✓ Directional covers field level, concert floor, and premium sideline — areas underseat can never reach
- ✓ Underseat delivers maximum density and frequency reuse in the upper deck — where directional SNR falls off
- ✓ Indoor APs handle concourse, concessions, suites, and back-of-house
- ✓ Each technology plays to its strength — no single approach covers everything

Extreme AP5060 — The MVP of Wi-Fi 7



Quad-Radio Wi-Fi 7

4x4:4 across 2.4, 5, and 6 GHz +
dedicated tri-band sensor —
up to 23 Gbps



Stadium-Grade Hardware

IP67 weatherized —
pressure-wash resistant,
-40°C to +60°C,
165 mph wind rated



Dual 10GbE with PoE Failover

Two multi-rate 10 Gbps ports —
hitless PoE failover or 15.4W
PSE out, operational on 802.3at



AP5060D —
Directional

AP5060U —
Under-seat



Software-Selectable Antennas

AP5060D: 20° or 70°
directional — AP5060U:
omnidirectional internal



Software-Defined Radios

Configurable modes:
Dual 5 GHz, Dual 6 GHz,
or tri-band —
adapt per venue zone



Built for Coexistence

Cellular Coexistence
Filter (CCF)
dual IoT radios:
BLE, Zigbee, Thread



Quad-radio Wi-Fi 7 — purpose-built for the most demanding stadium and venue environments

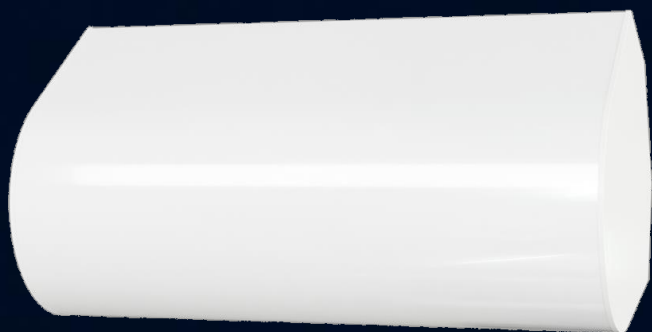
SIXTEEN SECTORS. ONE SYSTEM.

Precision Wi-Fi for Stadiums and Large Venues.



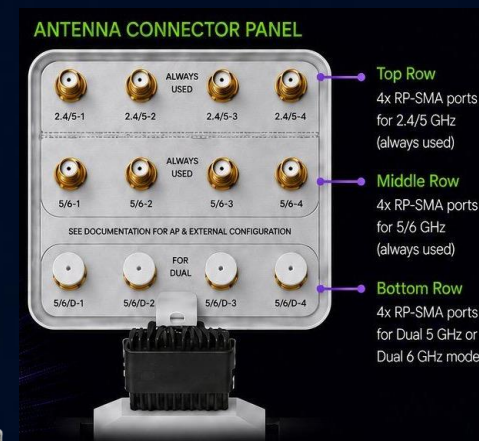
SYSTEM ARCHITECTURE

MatSing 16-Sector Lens Antenna



TOTAL: 16 APs | 16 SECTORS | ONE SYSTEM

THE ACCESS POINT



- Three 4×4:4 Wi-Fi radios and dedicated tri-band sensor
- Two 10GbE Ethernet ports
- Extended temp range —
–20°C to 50°C
(–4°F to 122°F)

AP5022FX
Wi-Fi 7 • 802.11be