

SMART SERVER ANTENNA

Low Profile Omnidirectional Antenna

KIT#: A91-JV4-C00

The Nextivity Smart Server Antenna delivers 360° indoor coverage with built-in intelligence for real-time network monitoring. Designed for seamless integration with CEL-FI and SHIELD systems, it supports public cellular, public safety, and CBRS networks including 4G, 5G, and P25. Its low-profile form enables flexible ceiling installation, while compatibility with Zigbee sensors and acoustic gunshot detection adds advanced safety features. With centralized control through the WAVE Portal and WAVE PRO app, this antenna future-proofs your connectivity infrastructure for Industry 4.0 applications—ensuring reliable, secure, and scalable indoor wireless performance.



Smart Server Antenna

Features and benefits include:

- **Server-Side Monitoring:** Remotely track antenna and network health in real time—including signal strength, system status, and critical performance metrics—through the Nextivity WAVE Portal.
- **Acoustic Gunshot Detection:** Features an integrated acoustic sensor that uses AI to classify gunshot events internally—ensuring privacy, accuracy through detection, and rapid response.
- **Nextivity Ecosystem Integration:** Engineered for plug-and-play compatibility for public cellular (CEL-FI), public safety (SHIELD), and private networking (HARMONY), working seamlessly across 4G, 5G, P25, and more.
- **Omnidirectional Coverage:** Low profile omnidirectional antenna provides 360-degree coverage, ensuring a strong and consistent signal reception from all directions within the indoor space.
- **IoT Sensor Compatibility:** Supports integration with IoT-enabled devices such as panic buttons, temperature sensors, and more—enabling advanced automation and safety applications within your network.
- **Installation Flexibility:** Compact and lightweight design enables simple installation on dropped or hard ceilings with included accessories. Comes with integrated DC power inserter.

Electrical Specifications

Frequency Band	450	600,700	800, 900	1700, 1800	1900, 2000, 2100, 2300, 2400, 2500, 2600	3300, 3500, 3600, 3700, 3800., 4000
Average Gain (Typ.)	2.2 dB	2.5 dB	3.3 dB	3.3 dB	3.8 dB	3.3 dB
Return Loss	-7 dB typ.					
BLE Frequency	2402-2480 MHz for path loss measurement and design optimization using WAVE PRO App					
BLE Output Power	8 dBm					
Input Voltage	3.3 to 13.2 VDC					
Input Voltage Interface	2-pin terminal block to provide DC bias using the included power inserter					
Impedance	50 Ω nom.					
Polarization	Horizontal					
Antenna Technology	SISO					
Radiation Pattern	Omni					
Input Power	2 W max.					
Connector	N-type (f)					
Pigtail Cable	0.82 ft (0.25 m) Black Jacket RG402					
Acoustic Sensor	Yes for Acoustic Gunshot Detection service when installed with WAVE Edge Server					

Mechanical

Housing Material	ASA UV Stable
Housing Color	White
Antenna Mounting	Dropped & Hard Ceiling
Operating Temperature	32 to 104 °F (0 to 40 °C)
Storage Temperature	-31 to +158 °F (-35 to +70 °C)
Non-Condensing Humidity	0% to 95%
Ingress Protection	IPX0
Dimensions	Φ 9.9 x 1.1 in (Φ 251 x 28 mm)
Product Weight	1.32 lbs (0.6 kg)

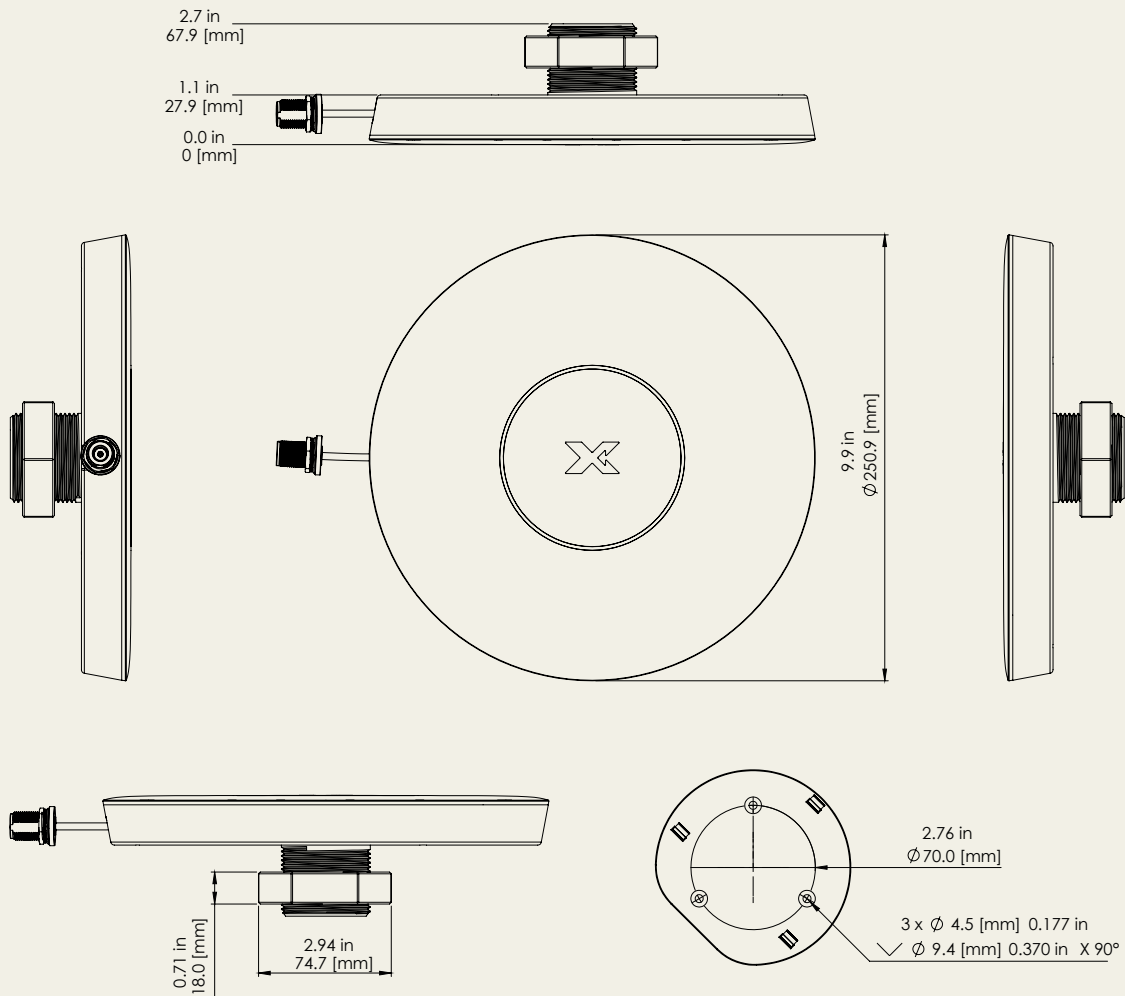
Compliance

FCC	Part 15
ISED	Compliant
CE	Compliant, RED 2014/53/EU
RoHS	Compliant
REACH	Compliant

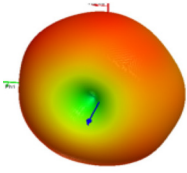
Ordering Information

KIT#	A91-JV4-C00	
Regions	AMER/EMEA/APAC	
Frequency	450-4200 MHz	
Compatibility	SHIELD EXTEND Coverage Unit F41-8XCUB SHIELD SOLO L41-7EB CEL-FI QUATRA 4000c Coverage Unit Q41-RECU CEL-FI QUATRA EVO Coverage Units Q41-BXCU, I41-WXCU	CEL-FI QUATRA 4000e Coverage Units Q41-EECU, Q41-HXCU CEL-FI QUATRA EVO Coverage Unit Q41-HXCU-2
Box Contents	Smart Server Antenna Power Inserter (C11-200-101) Dropped Ceiling Mounting Plate & Nut Hard Ceiling Mounting Plate Mounting Screws and Anchors	
Shipping Dimensions	10.35 x 10.12 x 2.91 in (263 x 257 x 74 mm)	
Shipping Weight	2.56 lbs (1.2 kg)	
GTIN-12 (U.P.C.)	812037034565	
Harmonized Tariff Schedule (HTS)	8517.18.00.50	
Export Control Classifications Number (ECCN)	EAR99	

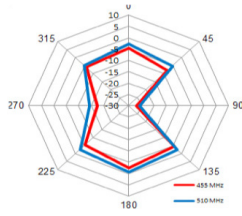
Outline



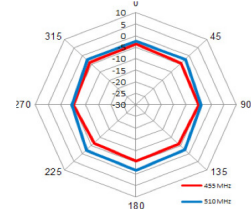
3.3 dB @ 1750 MHz



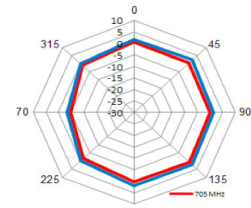
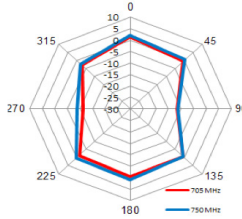
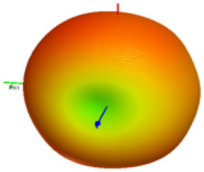
SIMULATION H-PLANE



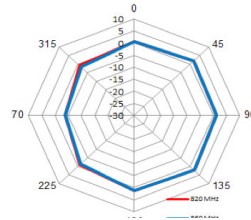
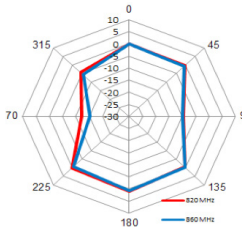
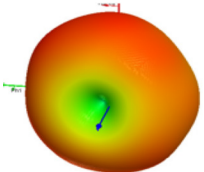
SIMULATION V-PLANE



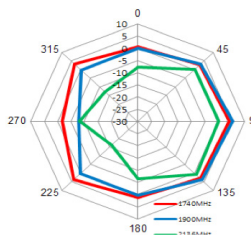
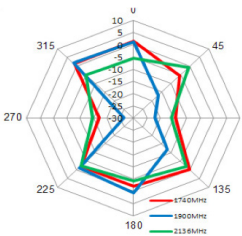
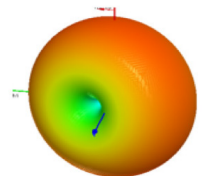
3.8 dB @ 1900 MHz



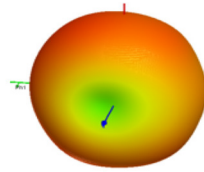
3.8 dB @ 2150 MHz



2.2 dB @ 500 MHz



2.5 dB @ 720 MHz



3.3 dB @ 840 MHz

