

Amazon Dublin Campus Rooftop Antenna Visibility Exhibits

Supplemental Planning Information for Application 6-060ARTW

Administrative Review Team
City of Dublin Ohio

September 2026

Purpose of This Supplement

This package provides the additional exterior planning information requested by the City of Dublin following its review of the original submission. It identifies the approximate rooftop antenna locations, presents planning-level sightline sections, and illustrates the completed low-profile installation without disclosing Amazon security-sensitive interior information.

Security and Photography Limitation

Amazon security policies prohibit project photography by the applicant and its contractors at the campus. The City has therefore accepted drawings or mockups in place of roof photographs. These exhibits use publicly available aerial context and sanitized exterior-only diagrams. Interior antenna locations, equipment rooms, cable routes, penetrations, access information and operational details are intentionally omitted.

Planning Conclusion

The proposed assemblies are located well within the roof areas. The height and depth of the buildings, together with the substantial setback from public-facing roof edges, place the antennas below representative ground-level sightlines. Final locations will maintain the approved visual-siting criteria while allowing safe roof access, electrical separation and placement within the existing lightning-protection zone.

Important Drawing Qualification

Building heights, viewpoint distances, setbacks and the seven-foot antenna envelope shown in this package are conservative planning estimates, not surveyed or as-built dimensions. They are provided to illustrate the visibility principle. Final field placement should be confirmed against actual roof conditions before installation.

Site Context and Proposed Rooftop Locations

Publicly available exterior imagery



The context shows the campus relationship to surrounding roads, properties and recreation areas. The assemblies are further set back within the individual roof areas.



CAMPUS DETAIL WITH FIVE APPROXIMATE ROOFTOP LOCATIONS

Existing Screening at the Two Story Building

Publicly available oblique context image



PUBLICLY AVAILABLE OBLIQUE CONTEXT IMAGE

Existing screening height to be field verified. Image used in place of project photography under Amazon security requirements.

Existing Conditions

The approximately 64-foot building contains an existing perimeter screening system around the principal rooftop equipment area. The proposed antenna assembly will be positioned within this screened roof area and substantially set back from the exterior walls. The exact screening height will be confirmed in the field before installation.

Visibility Effect

The existing screening is not the sole basis for concealment. It works together with the building height, roof depth and interior placement of the sled. These combined conditions limit views of the assembly from normal ground-level viewpoints outside the campus. Final placement will preserve equal or better screening than represented in these planning exhibits.

Security note. This publicly available contextual image is provided in place of a contractor-taken roof photograph because Amazon security policies prohibit project photography by the applicant and its contractors at the campus.

CMH051 Rooftop Visibility Exhibit

6685 Crosby Court Dublin Ohio

Building configuration	Height used	Roof setback used	Assembly envelope
One story	30 ft conservative	Approx. 150 ft	7 ft above roof

CMH051 6685 Crosby Court

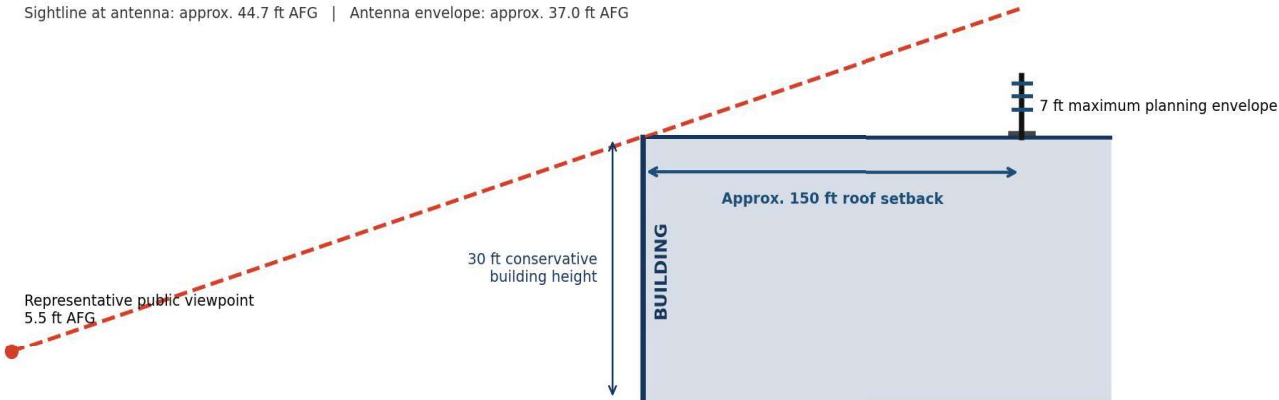


Red marker: approximate rooftop antenna location

SANITIZED EXTERIOR ROOF PLAN

PLANNING-LEVEL SIGHTLINE SECTION | West campus perimeter / Houchard Road

Sightline at antenna: approx. 44.7 ft AFG | Antenna envelope: approx. 37.0 ft AFG



Visibility Finding

Using a conservative 30-foot building height and an approximate 150-foot setback from the evaluated public-facing roof edge, the seven-foot planning envelope remains below the representative roof-edge sightline. The proposed location is therefore expected to be screened from normal ground-level view from West campus perimeter / Houchard Road. Final placement should preserve equal or greater visual screening.

CMH054 Rooftop Visibility Exhibit

6675 Crosby Court Dublin Ohio

Building configuration	Height used	Roof setback used	Assembly envelope
One story	30 ft conservative	Approx. 125 ft	7 ft above roof

CMH054 6675 Crosby Court

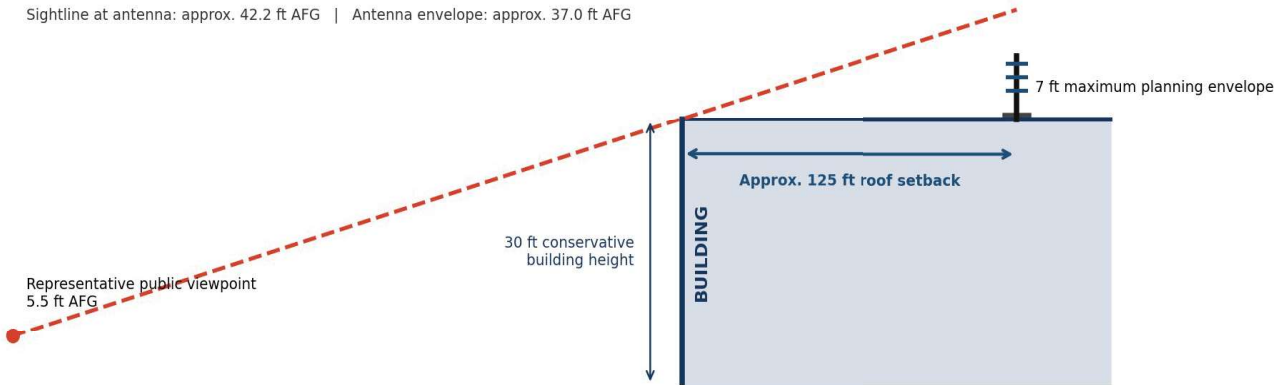


Red marker: approximate rooftop antenna location

SANITIZED EXTERIOR ROOF PLAN

PLANNING-LEVEL SIGHTLINE SECTION | North campus perimeter / State Route 161

Sightline at antenna: approx. 42.2 ft AFG | Antenna envelope: approx. 37.0 ft AFG



Visibility Finding

Using a conservative 30-foot building height and an approximate 125-foot setback from the evaluated public-facing roof edge, the seven-foot planning envelope remains below the representative roof-edge sightline. The proposed location is therefore expected to be screened from normal ground-level view from North campus perimeter / State Route 161. Final placement should preserve equal or greater visual screening.

CMH057 Rooftop Visibility Exhibit

6665 Crosby Court Dublin Ohio

Building configuration	Height used	Roof setback used	Assembly envelope
One story	30 ft conservative	Approx. 120 ft	7 ft above roof

CMH057 6665 Crosby Court

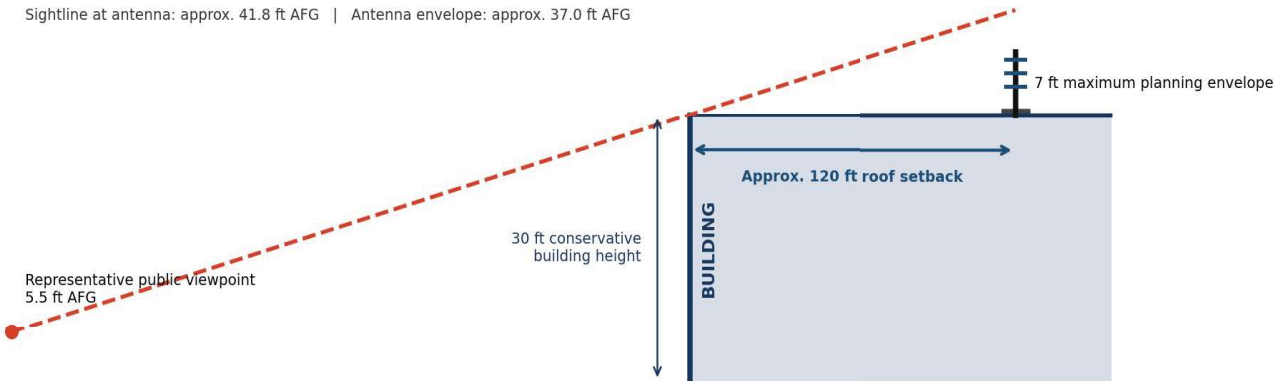


Red marker: approximate rooftop antenna location

SANITIZED EXTERIOR ROOF PLAN

PLANNING-LEVEL SIGHTLINE SECTION | North campus perimeter / State Route 161

Sightline at antenna: approx. 41.8 ft AFG | Antenna envelope: approx. 37.0 ft AFG



Visibility Finding

Using a conservative 30-foot building height and an approximate 120-foot setback from the evaluated public-facing roof edge, the seven-foot planning envelope remains below the representative roof-edge sightline. The proposed location is therefore expected to be screened from normal ground-level view from North campus perimeter / State Route 161. Final placement should preserve equal or greater visual screening.

CMH060 Rooftop Visibility Exhibit

6655 Crosby Court Dublin Ohio

Building configuration	Height used	Roof setback used	Assembly envelope
One story	30 ft conservative	Approx. 100 ft	7 ft above roof

CMH060 6655 Crosby Court

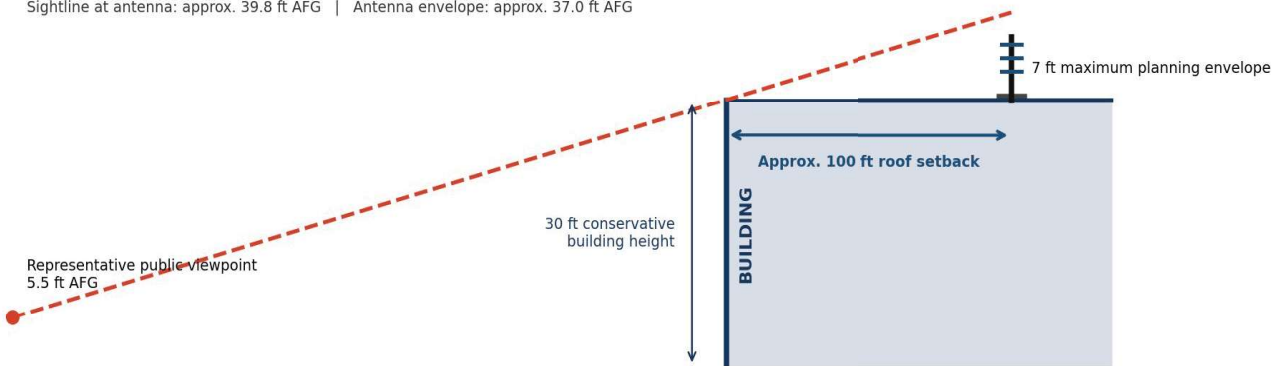


Red marker: approximate rooftop antenna location

SANITIZED EXTERIOR ROOF PLAN

PLANNING-LEVEL SIGHTLINE SECTION | North campus perimeter / State Route 161

Sightline at antenna: approx. 39.8 ft AFG | Antenna envelope: approx. 37.0 ft AFG



Visibility Finding

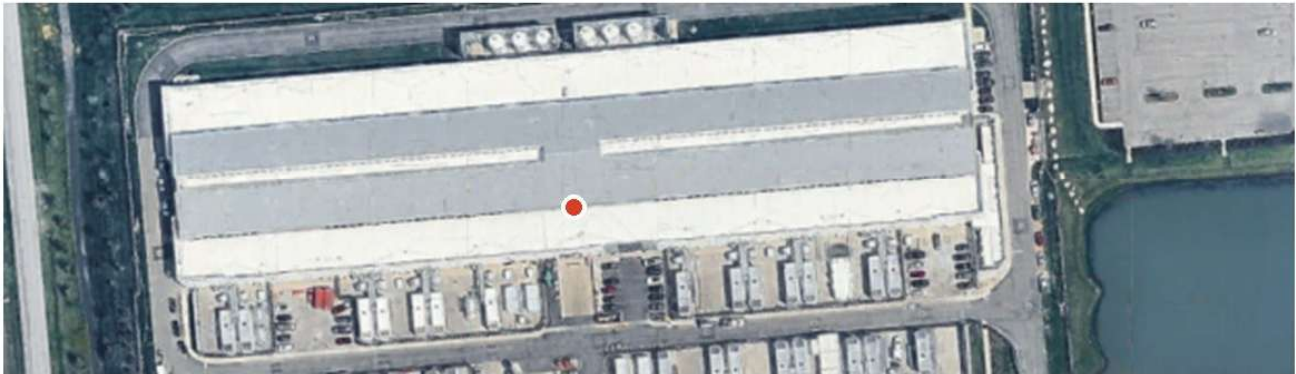
Using a conservative 30-foot building height and an approximate 100-foot setback from the evaluated public-facing roof edge, the seven-foot planning envelope remains below the representative roof-edge sightline. The proposed location is therefore expected to be screened from normal ground-level view from North campus perimeter / State Route 161. Final placement should preserve equal or greater visual screening.

CMH063 Rooftop Visibility Exhibit

6645 Crosby Court Dublin Ohio

Building configuration	Height used	Roof setback used	Assembly envelope
Two story	60 ft conservative	Approx. 80 ft	7 ft above roof

CMH063 6645 Crosby Court

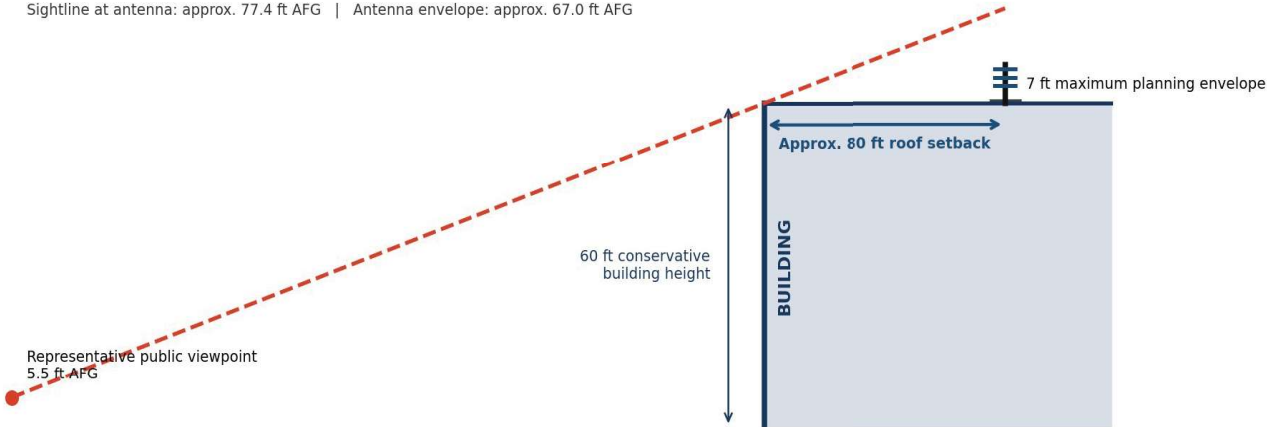


Red marker: approximate rooftop antenna location

SANITIZED EXTERIOR ROOF PLAN

PLANNING-LEVEL SIGHTLINE SECTION | East campus perimeter / adjacent property

Sightline at antenna: approx. 77.4 ft AFG | Antenna envelope: approx. 67.0 ft AFG



Visibility Finding

Using a conservative 60-foot building height and an approximate 80-foot setback from the evaluated public-facing roof edge, the seven-foot planning envelope remains below the representative roof-edge sightline. The proposed location is therefore expected to be screened from normal ground-level view from East campus perimeter / adjacent property. Final placement should preserve equal or greater visual screening.

Representative Installation and Visibility Method

Exterior planning information only

Representative Rooftop Assembly

Each building will receive a low-profile non-penetrating ballasted roof mount with a nominal five-foot mast supporting up to three directional LPDA donor antennas. The installation does not include a freestanding tower, foundation, equipment shelter, outdoor carrier base station, new utility service, fencing, lighting or signage.

Element	Planning representation
Mount	ROHN JRM or approved equivalent non-penetrating ballasted roof mount
Mast	Nominal five-foot mast
Donor antennas	Up to three Nextivity LPDA-R directional antennas
Maximum envelope shown	Seven feet above roof surface for conservative planning
Exterior cabling	Limited coaxial cabling, secured and routed to the building entry point
Finish	Standard manufacturer finishes consistent with ordinary rooftop communications equipment

Sightline Method

Each section uses an observer eye height of approximately 5.5 feet above finished grade and a representative public viewpoint approximately 250 feet from the evaluated building face. A line is projected from the observer through the public-facing roof edge and across the roof to the proposed antenna location. The assembly is considered screened in the planning diagram when its maximum envelope remains below that line.

Installation Criteria

- Maintain the assembly well inside the roof perimeter and outside normal public sightlines.
- Preserve safe access around roof edges, mechanical equipment and designated maintenance paths.
- Maintain required separation from electrical and lightning-protection components.
- Place the assembly within the protective zone of the existing lightning-protection system and bond or ground it in accordance with the approved electrical design and applicable requirements.
- Do not expose interior system information in public planning exhibits.
- Before installation, confirm the final rooftop location against actual field conditions. If the planning estimates vary materially from field measurements, reposition the assembly within the approved roof area or update the visibility documentation as appropriate.



Cel-Fi™ Wideband Directional Antenna

Smart Cellular Coverage



May 2020

Model Numbers:

A32-V32-200

A32-V32-201

The Cel-Fi Wideband Directional Antenna is an outdoor vertically polarized directional antenna; with 10dB gain in the low bands and 11dB gain in the high bands. The weather resistant housing is built with UV stabilized ABS plastic. Optimized for Cel-Fi products, the Cel-Fi Wideband Directional Antenna can be used with the Cel-Fi WAVE Antenna positioning app. The unit includes standard brackets for mounting, and can also be used with the Cel-Fi Pole Mount.

Both models include a 10kohm resistor for use with Nextivity Antenna Monitoring System.

FEATURES

- Boosts Cell Signal by up to 11 dBi
- 700 - 2700 MHz Frequency
- Vertical Polarization
- 10k Resistor Built-in

SPECIFICATIONS

ELECTRIC SPECIFICATION

Frequency Range	698-960 MHz	1710-2700 MHz
Gain	10 dBi	11 dBi
Horizontal Beamwidth	70°	
Vertical Beamwidth	50°	
F/B Ratio	≥15 dB	
VSWR	≤2.0	≤1.5
Input Impedance	50 Ω	
Polarization	Vertical	
Maximum Input Power	50W	
Lightning Protection	DC Ground	
Nextivity Donor Antenna	Compatible with 10 kΩ resistor	

MECHANICAL SPECIFICATION:

Connector Types (A32-V32-200)	SMA male
(A32-V32-201)	N-type female
Cable	2m coax (±30mm)
Dimension	450x205x60mm
Weight	550 g (±20g)
Reflector Material	Aluminum
Radome Material	ABS
Operating Temp:	-40°C to + 65°C

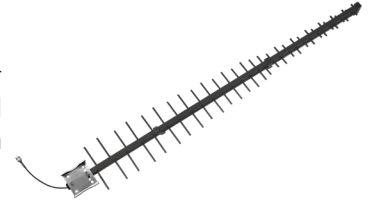
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LPDA-R DONOR ANTENNA

Smart Cellular Coverage

MODEL NUMBERS: A62-V44-201

The CEL-FI LPDA-R Antenna offers a powerful 12 to 14 dBi gain (depending on carrier frequency) over 617–4000 MHz and is designed to reduce out of band noise, to improve SiNR and overall signal quality. Mounting is made simple with included U-Bolts. This CEL-FI product also features a 10K ohm resistor that enables antenna monitoring when is used with CEL-FI Public Safety line of products.



LPDA-R Donor Antenna

Features and benefits include:

- 12–14 dBi Gain
- Narrow Beam-width to Reduce Noise
- Rugged Construction for Harsh Environments
- 10k Ohms Resistor Built-in for Public Safety Applications

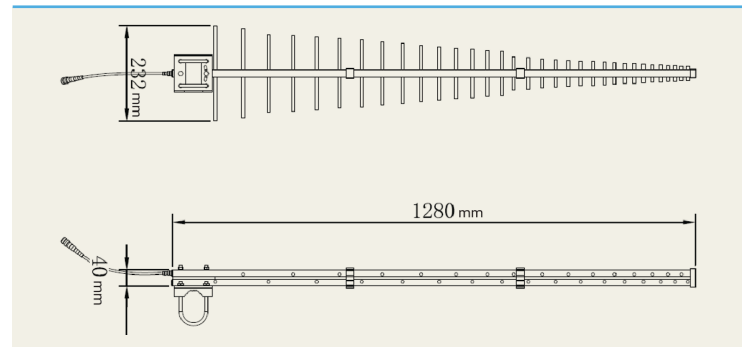
Electrical Specifications

Frequency (MHz)	617–960	1710–2700	3300–4000
Gain (dB)	12	14	12
VSWR	2.5	2.0	2.0
Polarization	Vertical		
Front to Back Ratio (dB)	20	24	13
Horizontal Beam Width	–125dBC	42°	36°
Vertical Beam Width	46°	34°	32°
Impedance (Ω Nom.)	50 ohms		
Input Power (W Max.)	50W		
Lighting Protection	DC Ground		

Mechanical Specifications

Connector	N-Female
Dimensions (mm)	1280 mm
Weight (kg)	1.6 kg
Reflector Material	Aluminum
Rated Wind Velocity	210 km/h
Operating Temperature°	-40°C to +65°C
Mounting Pole	Ø38–Ø52 mm

Mechanical Dimensions



CEL-FI QUATRA 4000c Fiber Hub

In-Building Cellular Coverage Expansion Solution

MODEL NUMBERS: Q40-1234FNU

The CEL-FI QUATRA 4000c Fiber Hub is a coverage expansion solution for the market's first neutral host active DAS hybrid with the convergence of private networking: CEL-FI QUATRA 4000c. The QUATRA 4000c Fiber Hub enables enterprises to expand their multi-operator coverage area, enabling a single CEL-FI QUATRA 4000c Network Unit (NU) to support up to six additional Coverage Units (CU) for a total of up to 12. The QUATRA 4000c Fiber Hub can be installed up to 2.0 km (1.24 M) away from the NU to cover a larger space or adjacent building while maintaining the same signal quality throughout the system.



Features and benefits include:

- Fiber expansions scales all-digital active DAS hybrid CEL-FI QUATRA 4000c for enterprise environments
- Ideal for easily increasing CEL-FI QUATRA 4000c coverage area with minimal infrastructure and costs
- Multi-carrier fiber expansion solution for 4G, 5G, and private networking with an industry-leading signal gain of up to 100 dB
- Lossless RF signal and Power-over-Ethernet (PoE) distribution with easy-to-install category cable architecture
- Remotely monitor and configure with Nextivity WAVE Portal without requiring separate LAN connectivity
- FCC certified

Specifications

Network Unit Compatibility	CEL-FI QUATRA 4000c Network Unit (Q44-1M34CNU & I44-1M34CNU) CEL-FI QUATRA 4000 Network Unit (Q44-1234CNU & I44-1234CNU)
Coverage Unit Compatibility	CEL-FI QUATRA 4000c Coverage Unit (Q41-RECU & I41-RECU) CEL-FI QUATRA 4000 Coverage Unit (Q41-5ECU & I41-5ECU)
# of Relay Bands	6 max. Source NU Port 4 unlock Industrial upgrade allows total 7
Independent Operators Supported	3 max.
Fiber Hub to CU Cable	2x Category Cables ANSI/TIA/EIA 568-B Compliant
Fiber Hub to CU Cable Distance	328 ft (100 m) (656 ft (200 m) with CEL-FI QUATRA Range Extender) max.
Product Settings & SW Updates	WAVE Portal for Desktop WAVE Field Tool for Windows

Interface

Power Port	IEC C14
Power Control	ON/OFF Switch
Status LED (Power)	Bi-Color Green/Red
Status LED (6x CU Link/SFP+)	Green
CU Interface	2x RJ45 per CU
NU Interface	SFP+ (not included)
# of CU max	6
Monitoring & Management	WAVE Portal via NU
Factory Debug & WAVE Field Tool	USB 2.0 Micro-B

Compliance

FCC	Part 15
UL	Yes
ISED	Yes

Power

Input Voltage	100-240 V
Input Current	3.5 A
Power Consumption	321.3 W max.
Power Cable	Type B (US) to IEC C13
Power Supply Cable	18 AWG
Power Supply Cable Length	6 ft (1.8 m)
Coverage Unit Power	PoE+ per IEEE 802.3at

Environmental

Operating Temperature	32 to 104 °F (0 to 40 °C)
Storage Temperature	-31 to 158 °F (-35 to 70 °C)
Heat Dissipation	Passive Convection
Surface Temperature	111°F (44 °C) max. at ambient
Non-condensing Humidity	0 to 95%
Ingress Protection Rating	IPX0

Mechanical

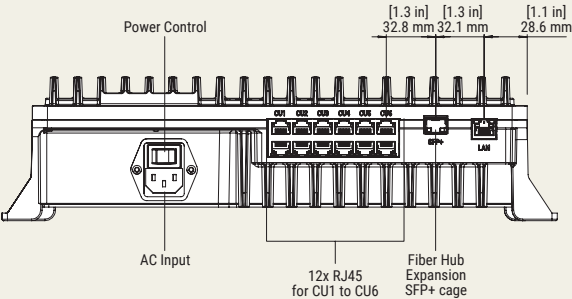
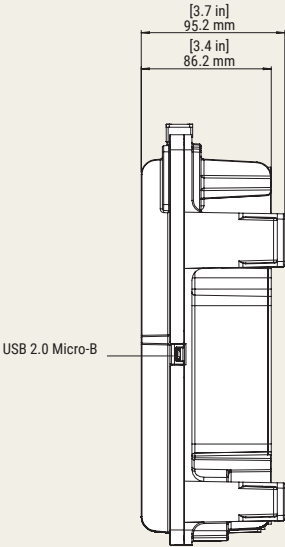
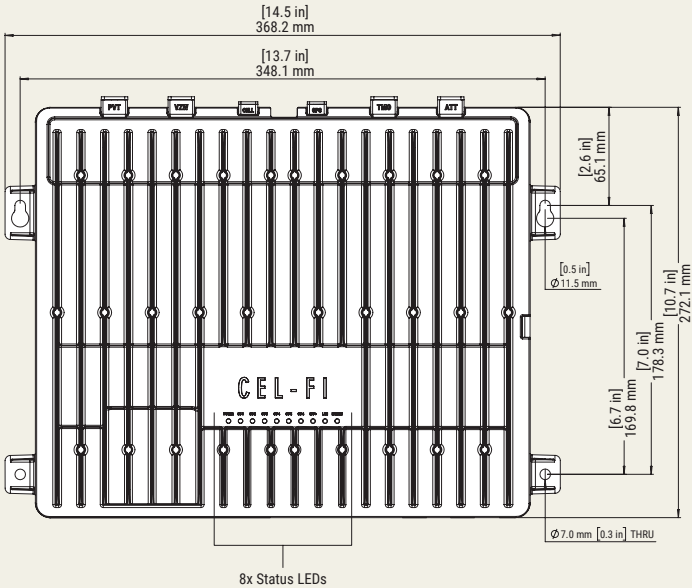
Main Unit Dimensions (in (mm))	14.5 x 11.6 x 3.7 (368.2 x 295.8 x 95.2)
Main Unit Weight (lbs (kg))	15.0 (6.8)
Mounting	Wall

Ordering Information

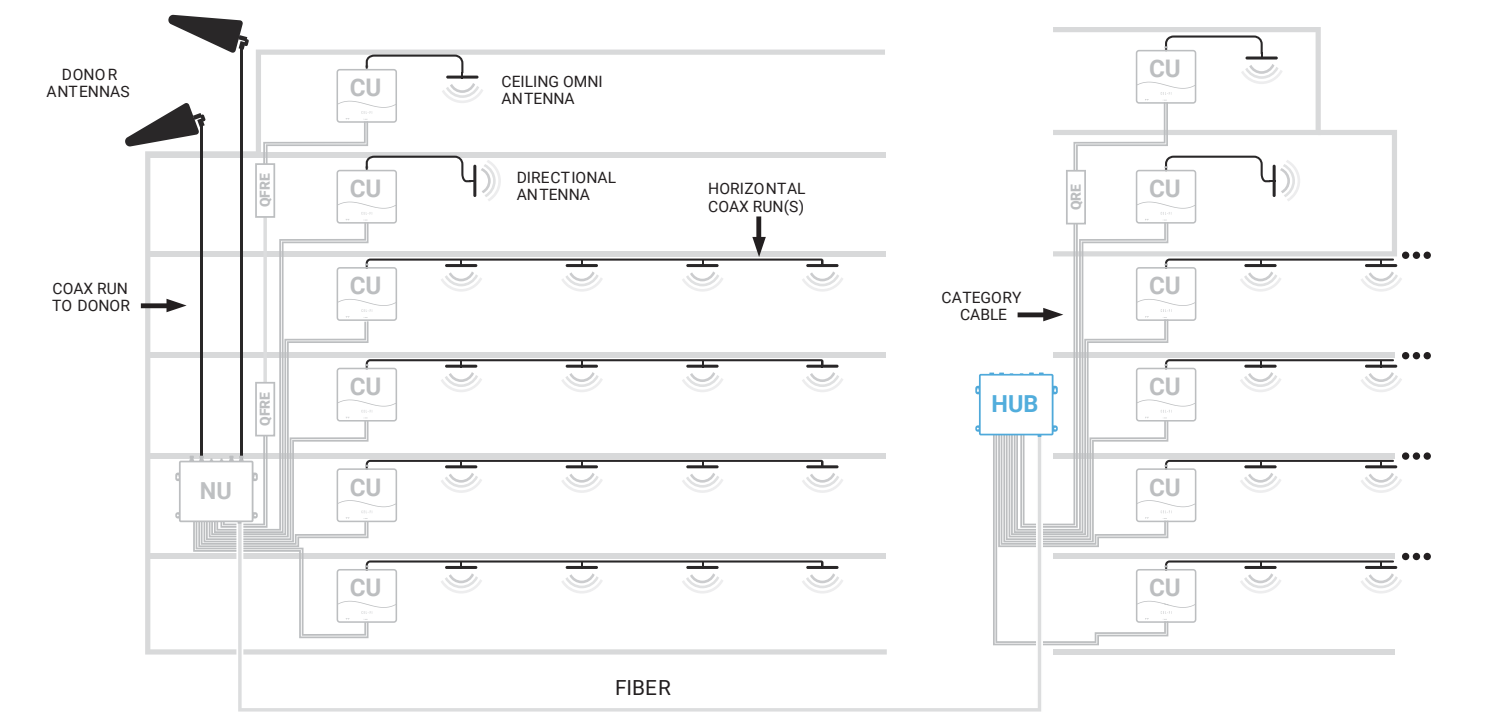
M/N	Q40-1234FNU
Region	AMER
Box Contents	QUATRA 4000c Fiber Hub
	1x AC Power Cable
	4x Mounting Screws
	4x Drywall Anchors
Shipping Dimensions (in (mm))	20.35 x 14.69 x 5.39 (517 x 373 x 137)
Shipping Weight (lbs (kg))	17.64 (8.0)
Harmonized Tariff Schedule (HTS)	8517.18.00.50
Export Control Classification Number (ECCN)	EAR99

Note: Product specifications are subject to change without prior notification.

CEL-FI QUATRA 4000c Fiber Hub Outline



Reference Configuration



LP SISO Indoor Omni Antenna

Smart Cellular Coverage

MODEL NUMBERS: A11-H43-201

Nextivity's CEL-FI® LP SISO Indoor Omni Antenna provides a 360 degree horizontal coverage pattern in an ultra-modern, low-profile, highperformance industrial design.

Features and benefits include:

- Indoor use
- SISO
- 50 ohm
- 617–4000 MHz
- N-type connector (other options available)
- Ultra low-profile



LP SISO Indoor Omni Antenna

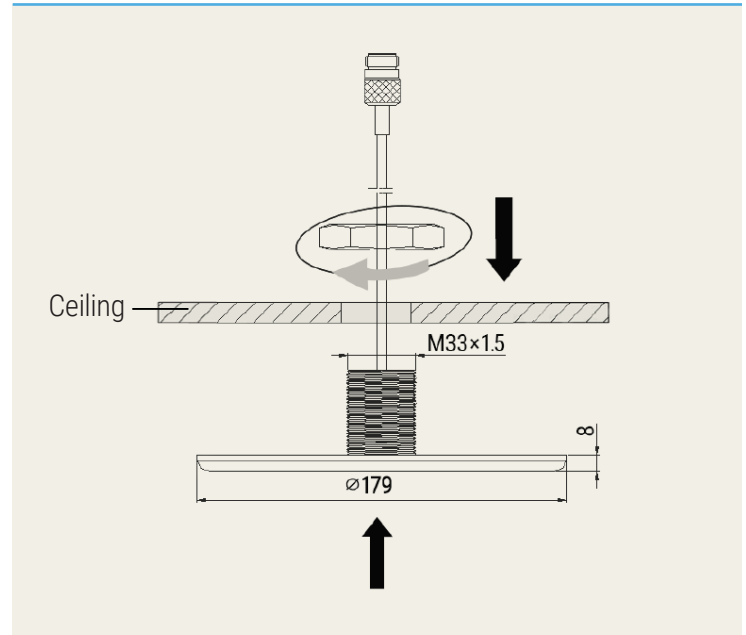
Electrical Specifications

Frequency (MHz)	617–960	1710–2700	3300–4000
Polarization	Linear, Horizontal		
Gain (dB)	3	4	5
VSWR	1.5		
Azimuth Beam Width	360°, Omni-directional		
Impedance (Ω Nom.)	50 Ohm		
Intermodulation IM3	–150		
Input Power (W Max.)	50W		

Mechanical Specifications

Connector	N-Female
Connector Position	Bottom
Height, Width, Depth	$\Phi 179 \times 8$ mm
Package Size	195x195x75 mm
Weight (kg)	220 $\pm$ 10 g
Radome Material	ABS
Radome Color	White (RAL 9003)
Operating Temperature°	–40–60°C
Mounting Pole	Fixed with nut

Mechanical Dimensions



CEL-FI QUATRA 4000c

In-Building Public and Private Cellular Coverage

MODEL NUMBERS: Q44-1M34CNU, Q41-RECU

CEL-FI QUATRA 4000c is an enterprise active DAS that delivers industry-leading public cellular coverage while enabling private cellular and IoT connectivity over a shared infrastructure. Combining intelligent multi-carrier signal distribution with support for CBRS-based private cellular networks, QUATRA 4000c helps organizations improve connectivity for employees, devices, and operational applications throughout their facilities. By supporting public cellular, private cellular, and IoT use cases on a common platform, QUATRA 4000c provides a flexible foundation for today's connectivity needs and tomorrow's wireless innovations.

Features and benefits include:

- Scalable all-digital active DAS hybrid for enterprise environments
- Converged neutral host cellular and CBRS private networking coverage solution
- Multi-carrier signal booster for 4G and 5G with industry-leading signal gain up to 100 dB
- Carrier approved and unconditionally network safe
- Lossless RF signal and Power-over-Ethernet (PoE) distribution with easy-to-install category cable architecture
- Site installation flexibility with operator specific donor antenna or small cell signal source
- Remotely monitor and configure with Nextivity WAVE Portal cloud management



QUATRA 4000c Bands

Bands	Network Unit Port	Downlink (MHz)	Uplink (MHz)	Technology/Bandwidth	Uplink Power (dBm)
2	ATT, VZW, TMO	1930-1990	1850-1910	5G/4G/20 MHz	22
4	ATT, VZW, TMO	2110-2155	1710-1755	5G/4G/20 MHz	22
5	ATT only	869-894	824-849	5G/4G/HSPA/20 MHz	20
12	ATT & TMO	729-746	699-716	5G/4G/10 MHz	22
13	VZW only	746-756	777-787	5G/4G/10 MHz	22
25	ATT, VZW, TMO	1930-1995	1850-1915	5G/4G/20 MHz	22
30*	ATT only	2350-2360	2305-2315	5G/4G/10 MHz	19
48**	PVT only	3550-3700	3550-3700	5G/4G/10 MHz	22
71*	TMO only	617-652	663-698	5G/4G/20 MHz	22

*Available only with Industrial upgrade via WAVE Portal

** Available only with PVT port unlock. Contact your distributor.

QUATRA 4000c Specifications

Network Selection	Automatically best available (WAVE Portal for manual setting)
Duplex Modes	FDD & TDD
# of Relay Bands	6 max. Port 4 unlock Industrial upgrade allows total 7
Independent Operators Supported	3 max.
Relay Bandwidth per NU Donor Port (ATT/TMO/VZW)	20 + 20 MHz max.
CU DL Power (All Public Bands)	16 dBm max.
CU DL Power (PVT Port Band 48)	20 dBm max.
System Gain	100 dB max.
Enterprise-Grade Echo Cancellation	30 dB min.
Noise Figure (All Bands)	7 dB max. at ambient (8 dB max. for Band 13 only)
Return Loss	-8 dB max.
UL Transmit EVM	8.5 %, 16-QAM with full RB allocation
DL Transmit EVM	8.5%, E-TM3.1
DL Input Level	-120 to -40 dBm
RF Interface Impedance (All Ports)	50 Ω
NU to CU Cable	2x Category 5e or better Cables ANSI/TIA/EIA 568-B Compliant
NU to CU Cable Distance	328 ft (100 m) (656 ft (200 m) with CEL-FI QUATRA Range Extender) max. with Cat5e 492 ft (150 m) (984 ft (300 m) with CEL-FI QUATRA Range Extender) max. with Cat6a 23 AWG
Product Settings & SW Updates	WAVE Portal for Desktop

Network Unit Interface

Donor Port RF Connectors	4x N-type (f) (ATT TMO VZW PVT)
Power Port	IEC C13
Power Control	ON/OFF Switch
Cellular Modem Antenna Connector	1x SMA (f)
Cellular Modem GPS Antenna Port	1x SMA (f)
Cellular Modem SIM	Nano SIM (Included with 1-year free service)
Status LED (Power/LAN/Modem)	Bi-Color Green/Red
Status LED (6x CU Link/SFP+)	Green
CU Interface	2x RJ45 per CU
# of CU max. per NU	6
NU-Hub Expansion	SFP+
# of CU max per CEL-FI QUATRA 4000 Fiber Hub (Q40-1234FNU)	6
Monitoring & Management	LAN RJ45
COMPASS XR and Factory Debug	USB 2.0 Micro-B

Coverage Unit Interface

Server Antenna RF Connector	N-type (f)
NU Connectivity	2x RJ45
Status LED (Power)	Bi-Color Green/Red
Status LED(NU Link/Cable Link)	Green
Factory Debug Only	USB 2.0 Micro-B

Compliance

FCC	Part 15
	Part 20
	Part 22
	Part 24
	Part 27
	Part 90
UL	Part 96
	Yes
ISED	Yes
	(for Q44-1M34CNU & Q41-RECU only)

QUATRA 4000c Power

Input Voltage	100-240 V
Power Consumption	321.3 W max.
Power Cable	Type B (US) to IEC C13
Power Supply Cable	18 AWG
Power Supply Cable Length	4.5 ft (1.37 m)
Coverage Unit Power	Power over Ethernet

Environmental

Operating Temperature	32 to 104 °F (0 to 40 °C)
Storage Temperature	-31 to 158 °F (-35 to 70 °C)
Heat Dissipation	Passive Convection
Surface Temperature	111°F (44 °C) max. at ambient
Non-condensing Humidity	0 to 95%
Ingress Protection Rating	IP20

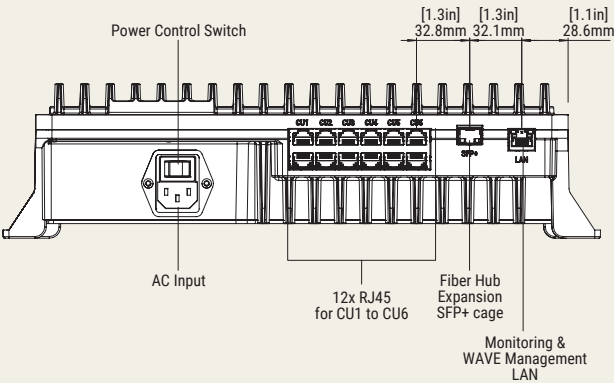
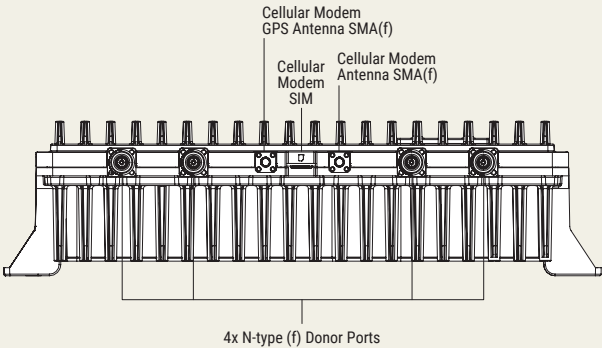
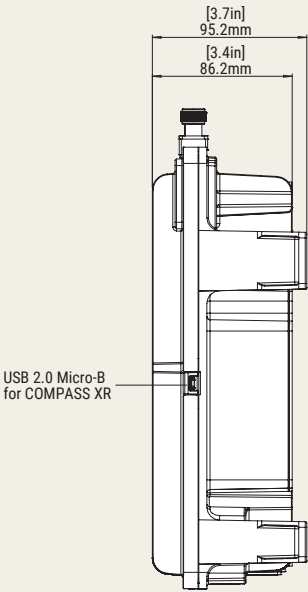
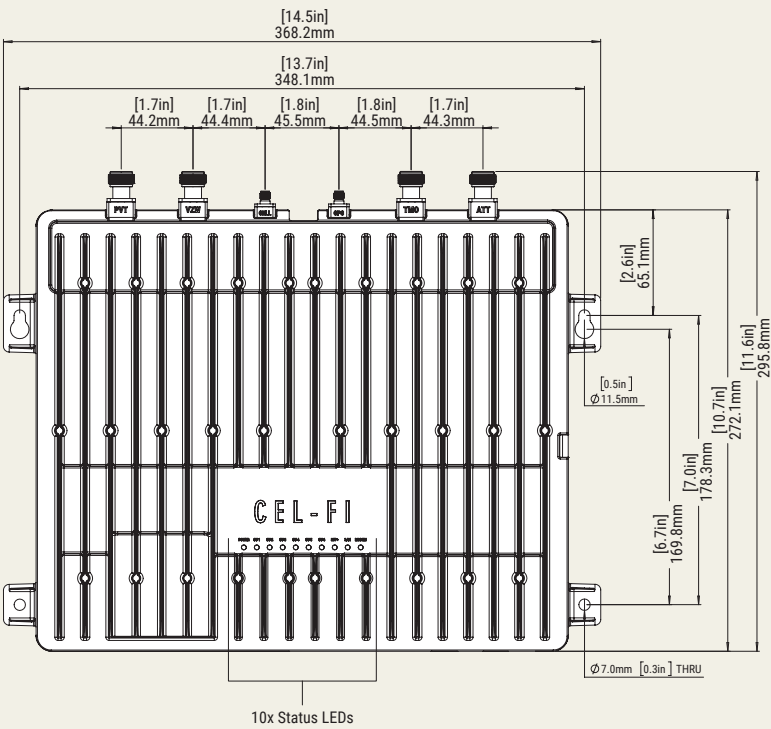
Mechanical & Packaging

Network Unit Box Contents	Network Unit
	1x AC Power Cable
	4x Mounting Screws
	4x Drywall Anchors
	1x Cellular Modem Antenna
Coverage Unit Box Contents	Coverage Unit
	4x Mounting Screws
	4x Drywall Anchors
	2x Eye Bolt w/ nuts
Network Unit Dimensions	14.5 x 11.6 x 3.7 in (368.2 x 295.8 x 95.2 mm)
Network Unit Weight	15.0 lbs (6.8 kg)
Network Unit Shipping Dimensions	20.35 x 14.69 x 5.39 in (517 x 373 x 137 mm)
Networking Unit Shipping Weight	17.64 lbs (8.0 kg)
Coverage Unit Dimensions	11.3 x 10.9 x 2.2 in (287.0 x 276.4 x 56.9 mm)
Coverage Unit Weight	9.9 lbs (4.5 kg)
Coverage Unit Shipping Dimensions	17.95 x 13.94 x 4.02 in (456 x 354 x 102 mm)
Coverage Unit Shipping Weight	11.90 lbs (5.4 kg)
Network Unit Mounting	Wall
Coverage Unit Mounting	Wall/Ceiling*

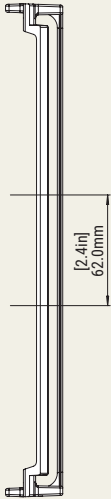
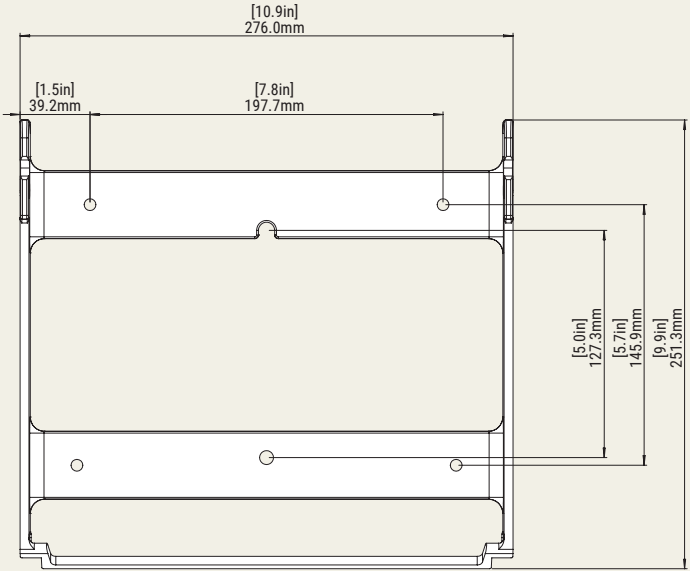
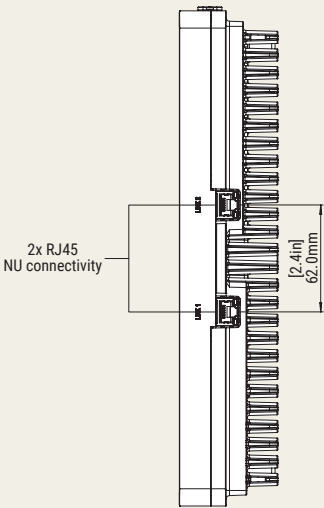
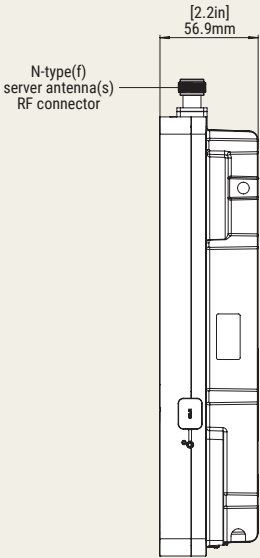
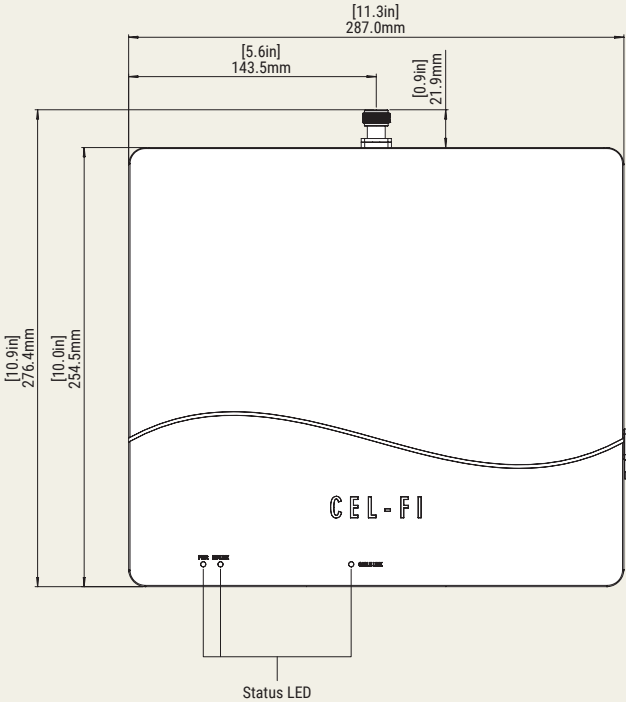
*CMA-100-100 sold separately for ceiling mount

Note: Product specifications are subject to change without prior notification.

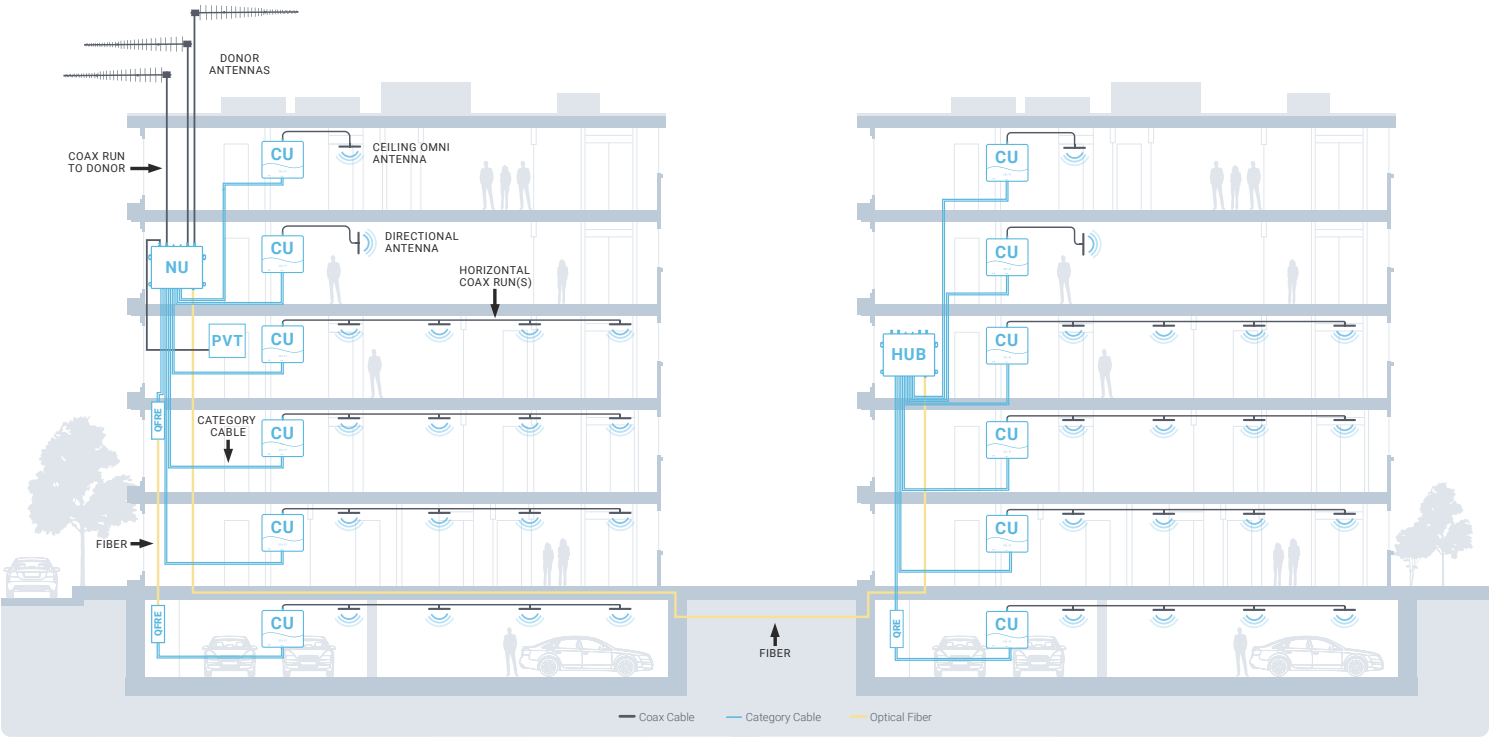
CEL-FI QUATRA 4000c Network Unit (NU)



CEL-FI QUATRA 4000c Coverage Unit (CU)



Example Diagram: 1 NU to 12 CUs



ROOF MOUNTS



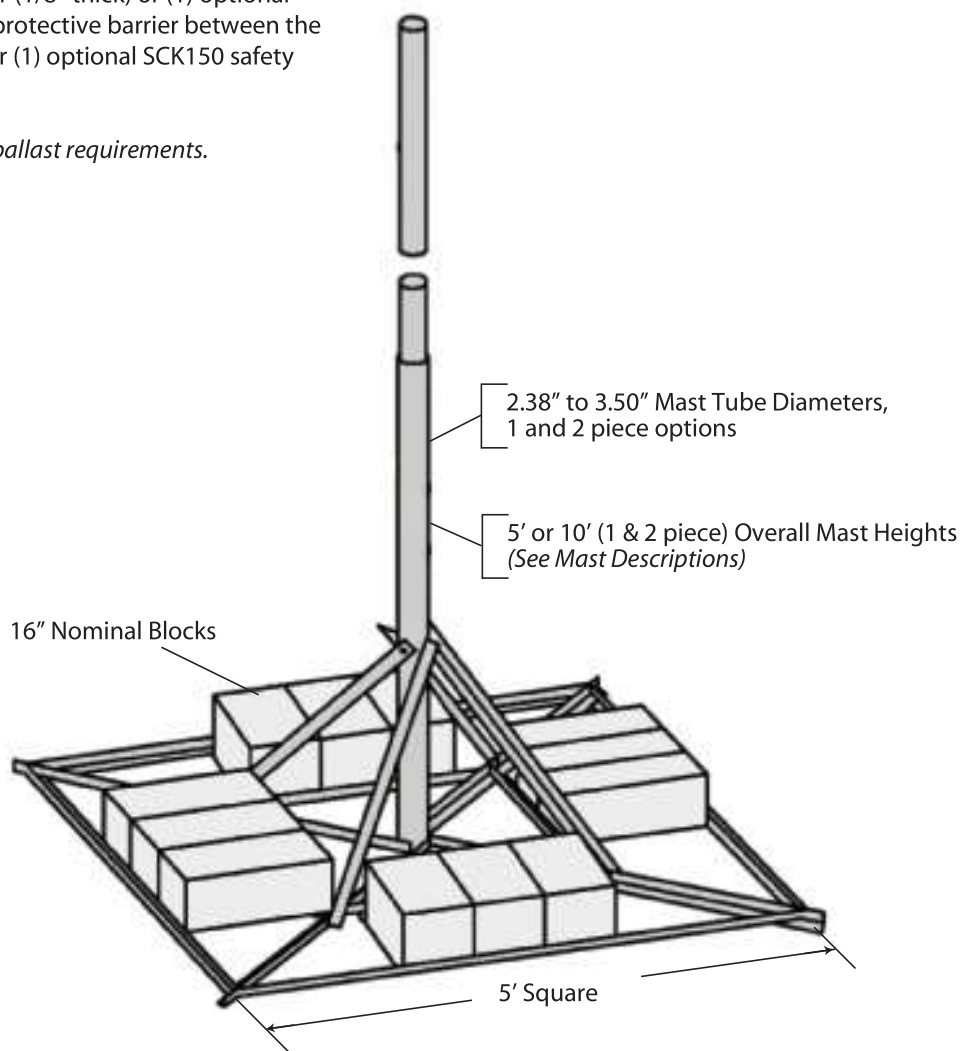


JRM NON-PENETRATING

The JRM ships broken down on one skid and weighs approximately 50 lbs. when assembled. The JRM is galvanized for corrosion protection. The JRM is used in cellular, PCS, broadband and other applications.

Order (1) optional JRMMAT (1/8" thick) or (1) optional JRMPAD (3/8" thick) for a protective barrier between the mount and the roof. Order (1) optional SCK150 safety cable kit (3/16" x 150').

Refer to pages 255-256 for ballast requirements.



MAST SPECIFICATIONS

Mount Part No.	Mast Part No.	Mast Description & Height
JRM23805	FZ1755	2.38" O.D. x 0.154" wall x 5.0' (HDG) (1 piece)
JRM23855	FZ1753 / FZ1754	2.38" O.D. x 0.154" wall x 10.0' (HDG) (2 pieces)
JRM23810	FZ1756	2.38" O.D. x 0.154" wall x 10.0' (HDG) (1 piece)
JRM27505	FZ1757	2.88" O.D. x 0.203" wall x 5.0' (HDG) (1 piece)
JRM27555	FZ1758 / FZ1759	2.88" O.D. x 0.203" wall x 10.0' (HDG) (2 pieces)
JRM27510	FZ1760	2.88" O.D. x 0.203" wall x 10.0' (HDG) (1 piece)
JRM35010	FZ1761	3.50" O.D. x 0.216" wall x 10.0' (HDG) (1 piece)

HDG = Hot-dip galvanized mast

JRM BALLAST REQUIREMENTS

Effective Projected Area (EPA) (FT ²)	Ballast (LBS)	Zero Velocity Load (PSF)	Vs (MPH)	Vmax at centroid of projected area, (MPH)							
				h=2 FT	h=3 FT	h=4 FT	h=5 FT	h=6 FT	h=7 FT	h=8 FT	h=9 FT
4	250	10.0	110	129	105	91	82	75	69	65	61
	350	14.0	131	153	125	108	97	88	82	76	72
	450	18.0	148	173	141	122	110	100	93	87	82
	550	22.0	164	191	156	135	121	111	102	96	90
	650	26.0	178	208	170	147	132	120	111	104	98
	750	30.0	191	224	183	158	141	129	120	112	105
	850	34.0	204	238	194	168	151	137	127	119	112
	950	38.0	215	252	205	178	159	145	135	126	119
	1050	42.0	226	265	216	187	167	153	141	132	125
	1150	46.0	237	277	226	196	175	160	148	138	131
	1250	50.0	247	289	236	204	183	167	154	144	136
5	250	10.0	99	115	94	82	73	67	62	58	54
	350	14.0	117	137	112	97	86	79	73	68	64
	450	18.0	133	155	126	110	98	89	83	77	73
	550	22.0	147	171	140	121	108	99	92	86	81
	650	26.0	159	186	152	132	118	107	100	93	88
	750	30.0	171	200	163	141	126	115	107	100	94
	850	34.0	182	213	174	151	135	123	114	106	100
	950	38.0	193	225	184	159	142	130	120	113	106
	1050	42.0	203	237	193	167	150	137	126	118	112
	1150	46.0	212	248	202	175	157	143	132	124	117
	1250	50.0	221	258	211	183	163	149	138	129	122
6	250	10.0	90	105	86	75	67	61	56	53	50
	350	14.0	107	125	102	88	79	72	67	62	59
	450	18.0	121	141	115	100	89	82	76	71	67
	550	22.0	134	156	128	111	99	90	84	78	74
	650	26.0	145	170	139	120	107	98	91	85	80
	750	30.0	156	183	149	129	115	105	98	91	86
	850	34.0	166	194	159	137	123	112	104	97	92
	950	38.0	176	205	168	145	130	119	110	103	97
	1050	42.0	185	216	176	153	137	125	115	108	102
	1150	46.0	193	226	185	160	143	131	121	113	107
	1250	50.0	202	236	192	167	149	136	126	118	111
7	250	10.0	84	98	80	69	62	56	52	49	46
	350	14.0	99	115	94	82	73	67	62	58	54
	450	18.0	112	131	107	93	83	76	70	65	62
	550	22.0	124	145	118	102	92	84	77	72	68
	650	26.0	135	157	128	111	100	91	84	79	74
	750	30.0	145	169	138	120	107	98	90	85	80
	850	34.0	154	180	147	127	114	104	96	90	85
	950	38.0	163	190	155	135	120	110	102	95	90
	1050	42.0	171	200	163	141	126	115	107	100	94
	1150	46.0	179	209	171	148	132	121	112	105	99
	1250	50.0	187	218	178	154	138	126	117	109	103
8	250	10.0	78	91	75	65	58	53	49	46	43
	350	14.0	92	108	88	76	68	62	58	54	51
	450	18.0	105	122	100	87	77	71	65	61	58
	550	22.0	116	135	111	96	86	78	72	68	64
	650	26.0	126	147	120	104	93	85	79	74	69
	750	30.0	135	158	129	112	100	91	85	79	75
	850	34.0	144	168	137	119	106	97	90	84	79
	950	38.0	152	178	145	126	113	103	95	89	84
	1050	42.0	160	187	153	132	118	108	100	94	88
	1150	46.0	168	196	160	138	124	113	105	98	92
	1250	50.0	175	204	167	144	129	118	109	102	96
10	250	10.0	70	82	67	58	52	47	44	41	38
	350	14.0	83	97	79	68	61	56	52	48	46
	450	18.0	94	110	89	77	69	63	59	55	52
	550	22.0	104	121	99	86	77	70	65	61	57
	650	26.0	113	132	107	93	83	76	70	66	62
	750	30.0	121	141	115	100	89	82	76	71	67
	850	34.0	129	151	123	106	95	87	80	75	71
	950	38.0	136	159	130	113	101	92	85	80	75
	1050	42.0	143	167	137	118	106	97	89	84	79
	1150	46.0	150	175	143	124	111	101	94	88	83
	1250	50.0	156	183	149	129	115	105	98	91	86

h = Distance from support surface to centroid of EPA.

Vmax = Effective wind velocity based on strength or overturning.

Vs = Effective wind velocity resulting in sliding on a flat surface with a .50 coefficient of friction.

NOTE: Mast strength may govern antenna capacity.



JRM BALLAST REQUIREMENTS

Effective Projected Area (EPA) (FT ²)	Ballast (LBS)	Zero Velocity Load (PSF)	Vs (MPH)	Vmax at centroid of projected area, (MPH)							
				h=2 FT	h=3 FT	h=4 FT	h=5 FT	h=6 FT	h=7 FT	h=8 FT	h=9 FT
12	250	10.0	64	75	61	53	47	43	40	37	35
	350	14.0	75	88	72	62	56	51	47	44	42
	450	18.0	86	100	82	71	63	58	53	50	47
	550	22.0	95	111	90	78	70	64	59	55	52
	650	26.0	103	120	98	85	76	69	64	60	57
	750	30.0	110	129	105	91	82	75	69	65	61
	850	34.0	118	137	112	97	87	79	73	69	65
	950	38.0	124	145	119	103	92	84	78	73	68
	1050	42.0	131	153	125	108	97	88	82	76	72
	1150	46.0	137	160	131	113	101	92	85	80	75
	1250	50.0	143	167	136	118	105	96	89	83	79
14	250	10.0	59	69	56	49	44	40	37	35	33
	350	14.0	70	82	67	58	52	47	44	41	38
	450	18.0	79	93	76	65	59	53	49	46	44
	550	22.0	88	102	84	72	65	59	55	51	48
	650	26.0	95	111	91	79	70	64	59	56	52
	750	30.0	102	120	98	85	76	69	64	60	56
	850	34.0	109	127	104	90	80	73	68	64	60
	950	38.0	115	135	110	95	85	78	72	67	63
	1050	42.0	121	141	115	100	89	82	76	71	67
	1150	46.0	127	148	121	105	94	85	79	74	70
	1250	50.0	132	154	126	109	98	89	82	77	73
16	250	10.0	55	65	53	46	41	37	35	32	30
	350	14.0	65	76	62	54	48	44	41	38	36
	450	18.0	74	87	71	61	55	50	46	43	41
	550	22.0	82	96	78	68	61	55	51	48	45
	650	26.0	89	104	85	74	66	60	56	52	49
	750	30.0	96	112	91	79	71	65	60	56	53
	850	34.0	102	119	97	84	75	69	64	60	56
	950	38.0	108	126	103	89	80	73	67	63	59
	1050	42.0	113	132	108	94	84	76	71	66	62
	1150	46.0	118	138	113	98	88	80	74	69	65
	1250	50.0	124	144	118	102	91	83	77	72	68
18	250	10.0	52	61	50	43	38	35	33	30	29
	350	14.0	62	72	59	51	46	42	38	36	34
	450	18.0	70	82	67	58	52	47	44	41	38
	550	22.0	77	90	74	64	57	52	48	45	43
	650	26.0	84	98	80	69	62	57	52	49	46
	750	30.0	90	105	86	75	67	61	56	53	50
	850	34.0	96	112	92	79	71	65	60	56	53
	950	38.0	102	119	97	84	75	68	63	59	56
	1050	42.0	107	125	102	88	79	72	67	62	59
	1150	46.0	112	131	107	92	83	75	70	65	62
	1250	50.0	116	136	111	96	86	79	73	68	64
20	250	10.0	49	58	47	41	37	33	31	29	27
	350	14.0	58	68	56	48	43	39	37	34	32
	450	18.0	66	77	63	55	49	45	41	39	37
	550	22.0	73	86	70	61	54	49	46	43	40
	650	26.0	80	93	76	66	59	54	50	47	44
	750	30.0	86	100	82	71	63	58	53	50	47
	850	34.0	91	106	87	75	67	61	57	53	50
	950	38.0	96	113	92	80	71	65	60	56	53
	1050	42.0	101	118	97	84	75	68	63	59	56
	1150	46.0	106	124	101	88	78	71	66	62	58
	1250	50.0	110	129	105	91	82	75	69	65	61
22	250	10.0	47	55	45	39	35	32	29	28	26
	350	14.0	56	65	53	46	41	38	35	33	31
	450	18.0	63	74	60	52	47	43	39	37	35
	550	22.0	70	82	67	58	52	47	44	41	38
	650	26.0	76	89	72	63	56	51	47	44	42
	750	30.0	82	95	78	67	60	55	51	48	45
	850	34.0	87	102	83	72	64	59	54	51	48
	950	38.0	92	107	88	76	68	62	57	54	51
	1050	42.0	97	113	92	80	71	65	60	56	53
	1150	46.0	101	118	96	83	75	68	63	59	56
	1250	50.0	105	123	101	87	78	71	66	62	58

h = Distance from support surface to centroid of EPA.

Vmax = Effective wind velocity based on strength or overturning.

Vs = Effective wind velocity resulting in sliding on a flat surface with a .50 coefficient of friction.

NOTE: Mast strength may govern antenna capacity.