

CEL-FI QUATRA 4000e

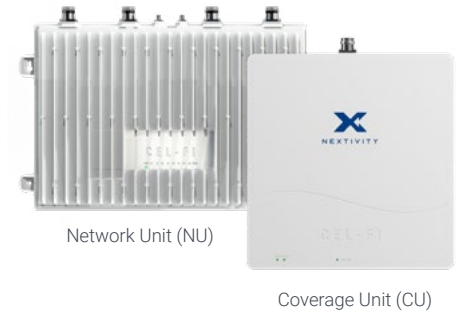
In-Building Cellular Coverage Solution

MODEL NUMBERS: Q44-E999CNU, Q41-EECU

Solving cellular coverage challenges for enterprise environments, CEL-FI QUATRA 4000e is a multi-carrier Active DAS Hybrid that offers uniform, high-quality cellular signal throughout any building. As an all-digital solution, QUATRA 4000e utilizes category cabling for RF and Power-over-Ethernet architecture to deliver industry-leading signal gain and scalability. In addition to unmatched performance, this cost-effective, carrier-grade system offers fiber expansion capabilities and can be installed within days. QUATRA 4000e is also carrier approved and guaranteed network safe.

Features and benefits include:

- Scalable all-digital Active DAS Hybrid for enterprise
- Multi-carrier signal booster for 3G, 4G, and 5G with industry-leading signal gain up to 100 dB
- 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
- Carrier approved and unconditionally network safe



Bands

Bands	Downlink MHz	Uplink MHz	Technology / Bandwidth	Uplink Power (dBm)	Downlink Power (dBm)
1	2110–2170	1920–1980	5G/4G/3G/20MHz	22	22
3	1805-1880	1710-1785	5G/4G/3G/20MHz	22	22
7	2620-2690	2500-2570	5G/4G/3G/20MHz	22	22
8	925-960	880-915	5G/4G/3G/15MHz	20	22
20	791-821	832-862	5G/4G/3G/20MHz	20	22
40*	2300-2390	2300-2390	5G/4G/3G/20MHz	22	19

* Available only on Donor Port A

Specifications

Frequency Bands	1/3/7/8/20/40
Relay Channel Bandwidths (MHz)	5/10/15/20
Network Protocols	WCDMA/LTE/DSS/NR
Network Selection	Automatically best available (WAVE Portal for manual setting)
Duplex Modes	FDD & TDD
# of Relay Bands	8 max. (2 bands per NU donor port)
Independent Operators Supported	4 max.
System Gain	100 dB max.
Enterprise-Grade Echo Cancellation	30 dB min.
Noise Figure (All Bands)	7 dB max. at ambient
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	-100 to -38 dBm
RF Interface Impedance (All Ports)	50 Ω
NU to CU Cable	2x Category 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)
Product Settings & SW Updates	WAVE Portal for Desktop

Network Unit Interface

Donor Port RF Connectors	4x 4.3-10 (f)
Power Port	IEC C14
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 4000e Fiber Hub (Q40-EFNU)	6
Monitoring & Management	LAN RJ45
COMPASS XR and Factory Debug	USB 2.0 Micro-B

Coverage Unit Interface

Server Antenna RF Connector	4.3-10 (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

Power

Input Voltage	85-264 V
Input Current	2.45 A
Power Consumption	480 W max.
Power Cable	Type C (EU) or Type I (AUS) or Type G (UK) 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

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	18.1 x 11.0 x 3.5 in (461 x 281 x 89 mm)
Network Unit Weight	19.4 lbs (8.80 kg)
Network Unit Shipping Dimensions	23.9 x 14.7 x 5.6 in (607 x 374 x 141 mm)
Networking Unit Shipping Weight	22.5 lbs (10.21 kg)
Coverage Unit Dimensions	13.0 x 11.6 x 2.5 in (330 x 295 x 64 mm)
Coverage Unit Weight	11.3 lbs (5.13 kg)
Coverage Unit Shipping Dimensions	18.2 x 15.8 x 4.6 in (462 x 402 x 116 mm)
Coverage Unit Shipping Weight	13.6 lbs (6.2 kg)
Network Unit Mounting	Wall
Coverage Unit Mounting	Wall/Ceiling*

*CMA-100-100 sold separately for ceiling mount

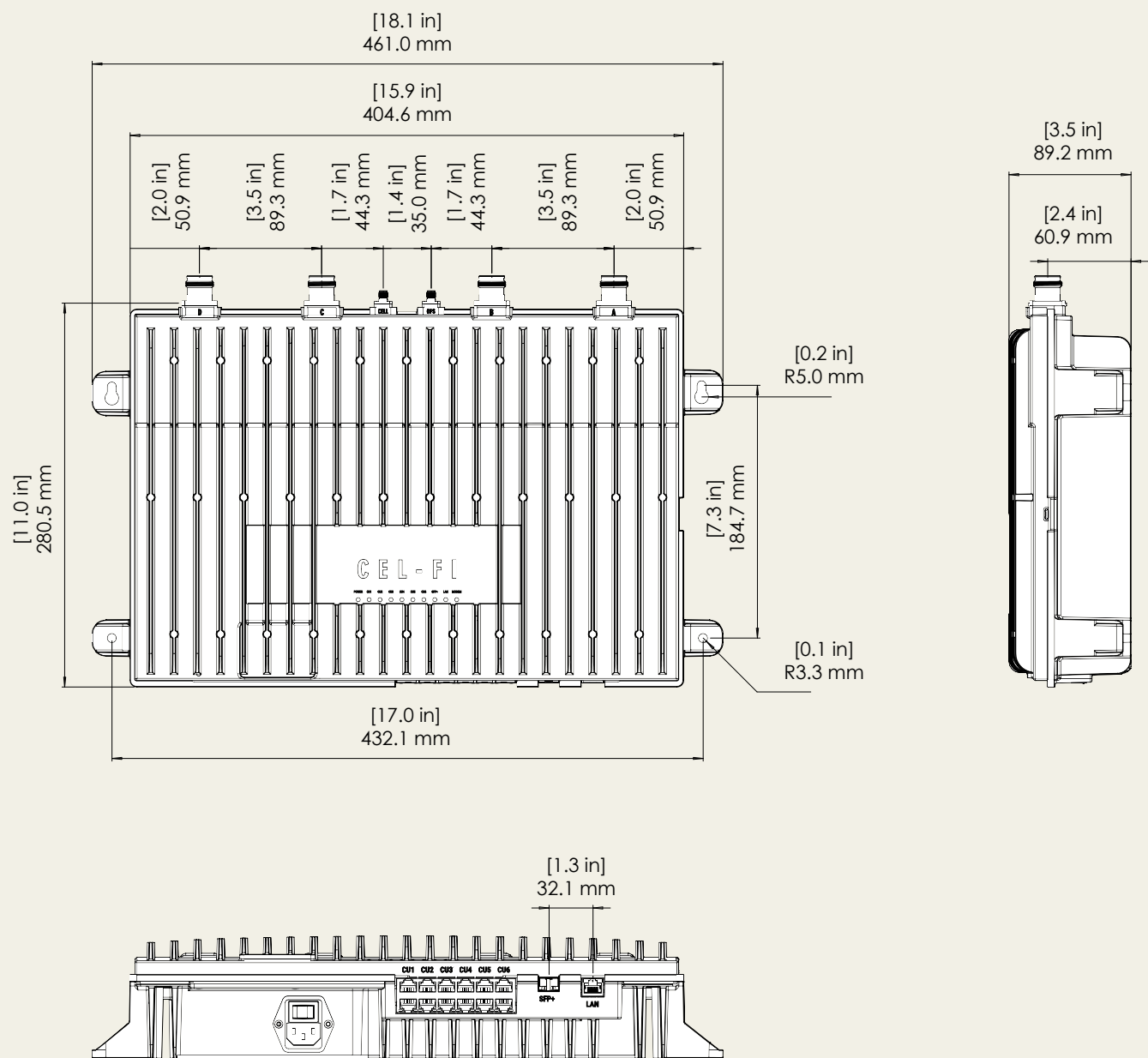
Compliance

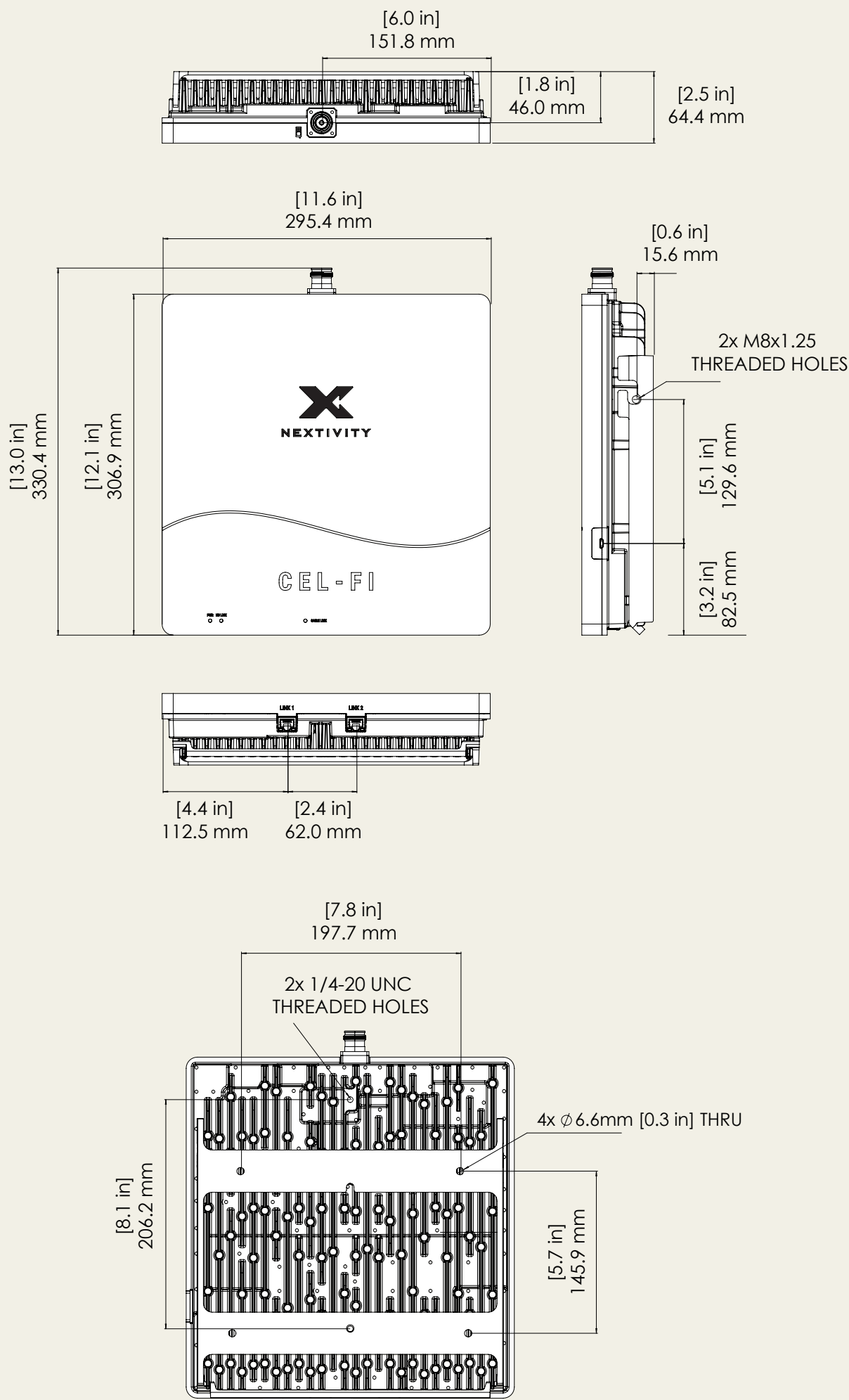
3GPP	TS 25.143 Rel 13 & 3GPP TS 36.143 Rel 13
CE	Compliant RED 2014/53/EU
ICASA	Yes
OFCOM	IR2102 & UKCA
RoHS3	EN 63000:2018

Environmental

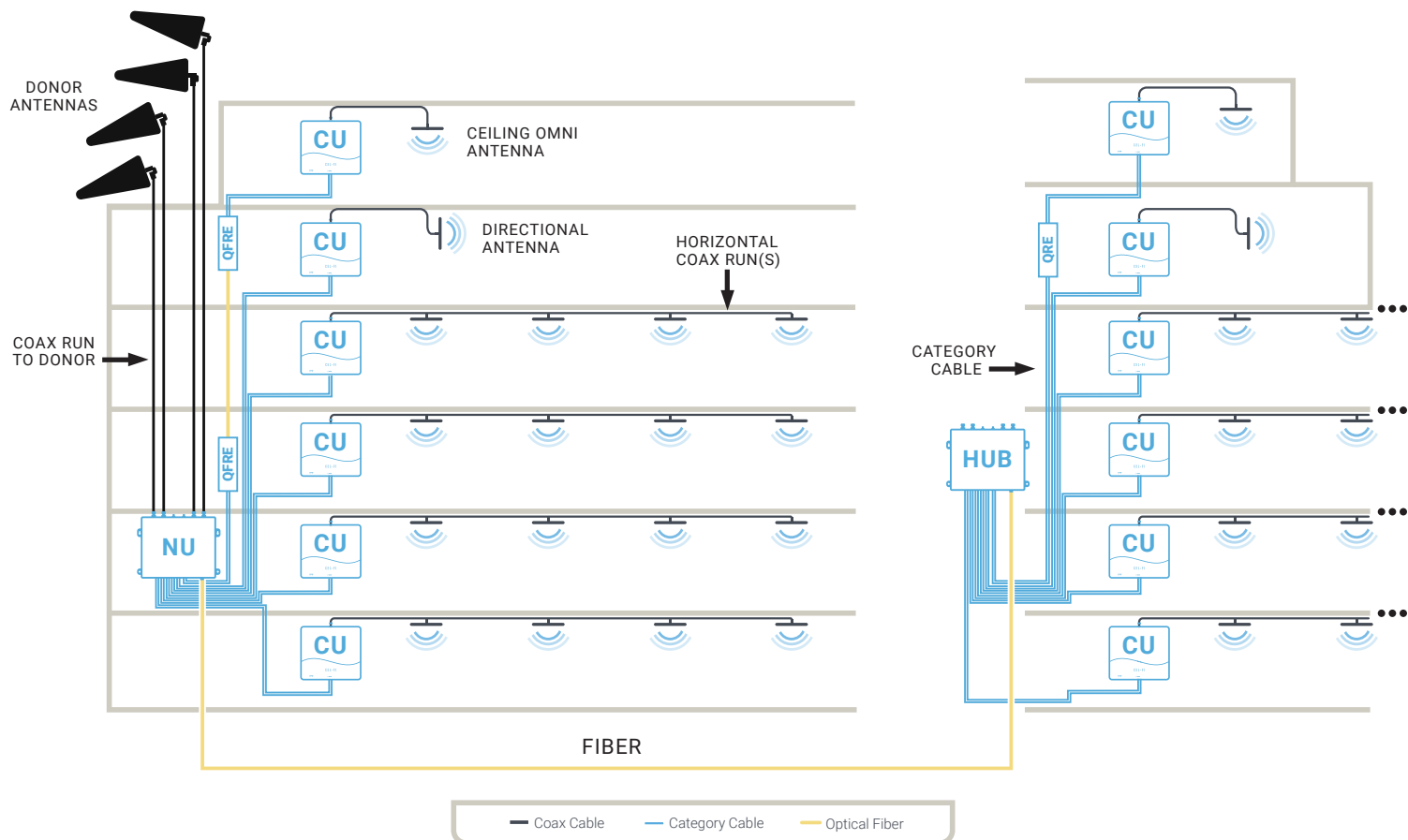
Operating Temperature	32 to 104 °F (0 to 40 °C)
Storage Temperature	-31 to 158 °F (-35 to 70 °C)
Heat Dissipation	Passive Convection
Surface Temperature	111°F (44 °C) max. at ambient
Non-condensing Humidity	0 to 95%
Ingress Protection Rating	IPX0

Network Unit (NU)





Two-Building Diagram: 1 NU to 12 CUs with CEL-FI QUATRA 4000e Fiber Hub



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

