

CEL-FI ROAM R41

Mobile Cellular Coverage Solution

Kit Numbers: R41-9B-001, R41-9B-003, R41-9B-004, R41-VB-001, R41-VB-003, R41-VB-004

The CEL-FI ROAM R41 mobile cellular coverage solution delivers reliable 3G, 4G, and 5G connectivity inside vehicles and boats. With the latest Nextivity propriety IntelliBoost chip, ROAM R41 offers enterprise-grade performance to solve poor coverage and enable dependable calling, texting, and streaming on the move. The system features plug-and-play operation for quick and easy set up, improving connectivity in any car, truck, RV, or boat within minutes. ROAM R41 also supports carrier switching through the Nextivity WAVE App for iOS and Android devices.

Features and benefits include:

- Deploy the unit anywhere in the network, with full frequency coverage
- Latest 4th generation Nextivity proprietary IntelliBoost chip delivers channelized coverage for specific mobile network operator signals
- Support for 3G, 4G, and 5G dynamic spectrum sharing (DSS)
- Ease of installation with plug-and-play operation



CEL-FI ROAM R41



Use Nextivity **WAVE** App to view real-time system performance.



Specifications

Frequency Bands	1/3/5/7/8/20/26/28
Relay Channel Bandwidths (MHz)	5/10/15/20
Networks	3G/4G/5G
Network Protocols	WCDMA/LTE/DSS
Network Selection	Automatically (MyWave App set to "Following")
Configured to authorized operator	PLMN-IDs
Duplex Modes	FDD
# of Relay Bands (MHz max.)	1
Relay Bandwidth (MHz max.)	20
Output Downlink Power (5/8/26/28) (dBm max.)	3 ¹
Output Downlink Power (1/3/7/20) (dBm max.)	0
Output Uplink Power (Bands 5/8/20/26/28L) (dBm max.)	22
Output Uplink Power (Bands 1/3/7) (dBm max.)	24
System Gain (dBm max.)	100
Enterprise-Grade Echo Cancellation (dB min.)	30
Return Loss (dB typ.)	-8

¹R41-VB kits only

Bands

Frequency Bands	Downlink (MHz)	Uplink (MHz)	Max. Relay BW (MHz)
1	2110-2170	1920-1980	20
3	1805-1880	1710-1785	20
5	869-894	824-849	15
7	2620-2690	2500-2570	20
8	925-960	880-915	15
20	791-821	832-862	20
26	859-894	814-849	20
28	758-803	703-748	20

Interface

Donor RF Connector	SMA (f)
Server RF Connector	SMA (f)
DC Input	5.5 x 2.5 mm (f) Barrel
Device Setup	Bluetooth for WAVE App
Power & System Status	Bi-color LED (Green/Red)
WAVE FIELD Tool	USB 2.0 Micro-B
System Management & SW Updates	WAVE App for iOS 11.0 or later WAVE App for Android
Band Selection	MyWAVE App for iOS 11.0 or later MyWave App for Android

Compliance

3GPP	TS 25.143 Rel 13 3GPP TS 36.143 Rel 13
CE	Compliant RED 2014/53/EU
RoHS3	EN 63000: 2018
ACMA/RCM	AS/NZS CISPR, 32:2013
Bluetooth	LE Ver 4.2

Power Supply

Power Consumption (W) max.	18
Input Voltage (VDC)	11.5 to 15
Input Current (A max.)	1.5
Power Supply Plug	Automobile Auxiliary Power
Power Supply Cable	18 AWG
Power Supply Cable Length (ft (m))	16.3 (5)

Environmental

Operating Temperature (°F (°C))	32 to 140 (0 to 60)
Storage Temperature (°F (°C))	-31 to 158 (-35 to 70)
Heat Dissipation	Passive Convection
Surface Temperature (°F (°C)) max. at ambient	111.2 (44)
Non-condensing Humidity	0 to 95%
Ingress Protection Rating	IPX0

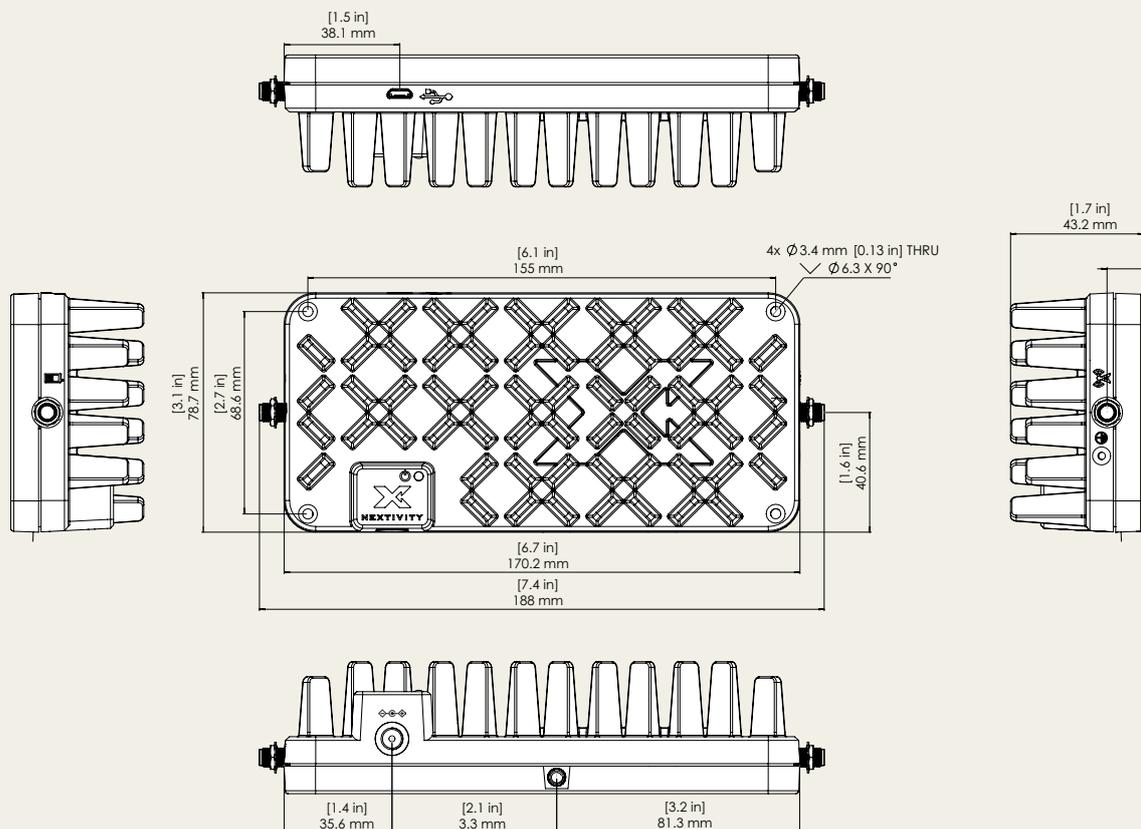
Mechanical & Packaging

Main Unit Dimensions (in (mm))	6.7 x 3.1 x 1.7 (170.2 x 78.7 x 43.2)
Main Unit Weight (lbs (kg))	1.08 (0.49)

Ordering Information

Kit Numbers	R41-9B-001	R41-9B-003	R41-9B-004	R41-VB-001	R41-VB-003	R41-VB-004
Region	EMEA			EMEA/APAC		
Frequency Bands	1/3/7/8/20			1/3/5/7/8/26/28		
Box Contents	Main Unit					
	1x Donor Antenna (A41-V21-100)			1x Donor Antenna (A41-V21-100)		
	1x Server Antenna (A41-V30-100)		1x Server Antenna (A41-V30-100)	1x Server Antenna (A41-V30-100)		1x Server Antenna (A41-V30-100)
	1x Automobile Auxiliary Power Adapter (290N035-005)					
	4x Mounting Screws					
	2x Mounting Velcro					
	Quick Installation Guide					
Kit Shipping Dimensions (in (mm))	12.40 x 3.94 x 3.23 (315 x 100 x 82)	8.47 x 3.94 x 3.19 (215 x 100 x 81)		12.40 x 3.94 x 3.23 (315 x 100 x 82)	8.47 x 3.94 x 3.19 (215 x 100 x 81)	
Kit Shipping Weight (lbs (kg))	2.20 (1.0)	1.74 (0.79)	1.87 (0.85)	2.20 (1.0)	1.74 (0.79)	1.87 (0.85)
GTIN-12 (U.P.C.)	812037032981	812037033001	812037034190	812037033308	812037033148	812037033223
Harmonized Tariff Schedule (HTS)	8517.18.00.50					
Export Control Classification Number (ECCN)	EAR99					

CEL-FI ROAM R41 Main Unit Outline



Product specifications are subject to change without prior notification.