



# CEL-FI ROAM R41

## Mobile Cellular Coverage Solution



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 channelised 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

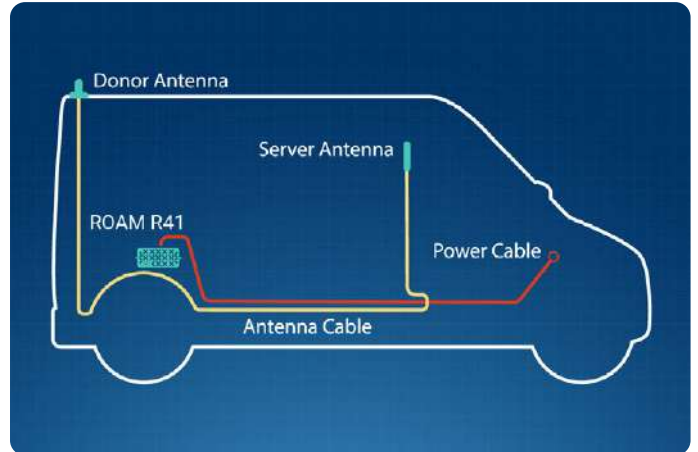




## Improve Your Coverage in Minutes

With enterprise-grade performance and its easy-to-install design, CEL-FI ROAM R41 can be set up, powered on, and improve cellular connectivity in no time. Whether you're in a car, truck, RV, or boat, ROAM R41 will keep you connected when you're on the move.

The system's low-profile design allows you to install it discretely under any seat, while its rugged frame offers trusted durability, so people and crews can keep their connection – improving productivity and safety.



## Choose Your Carrier

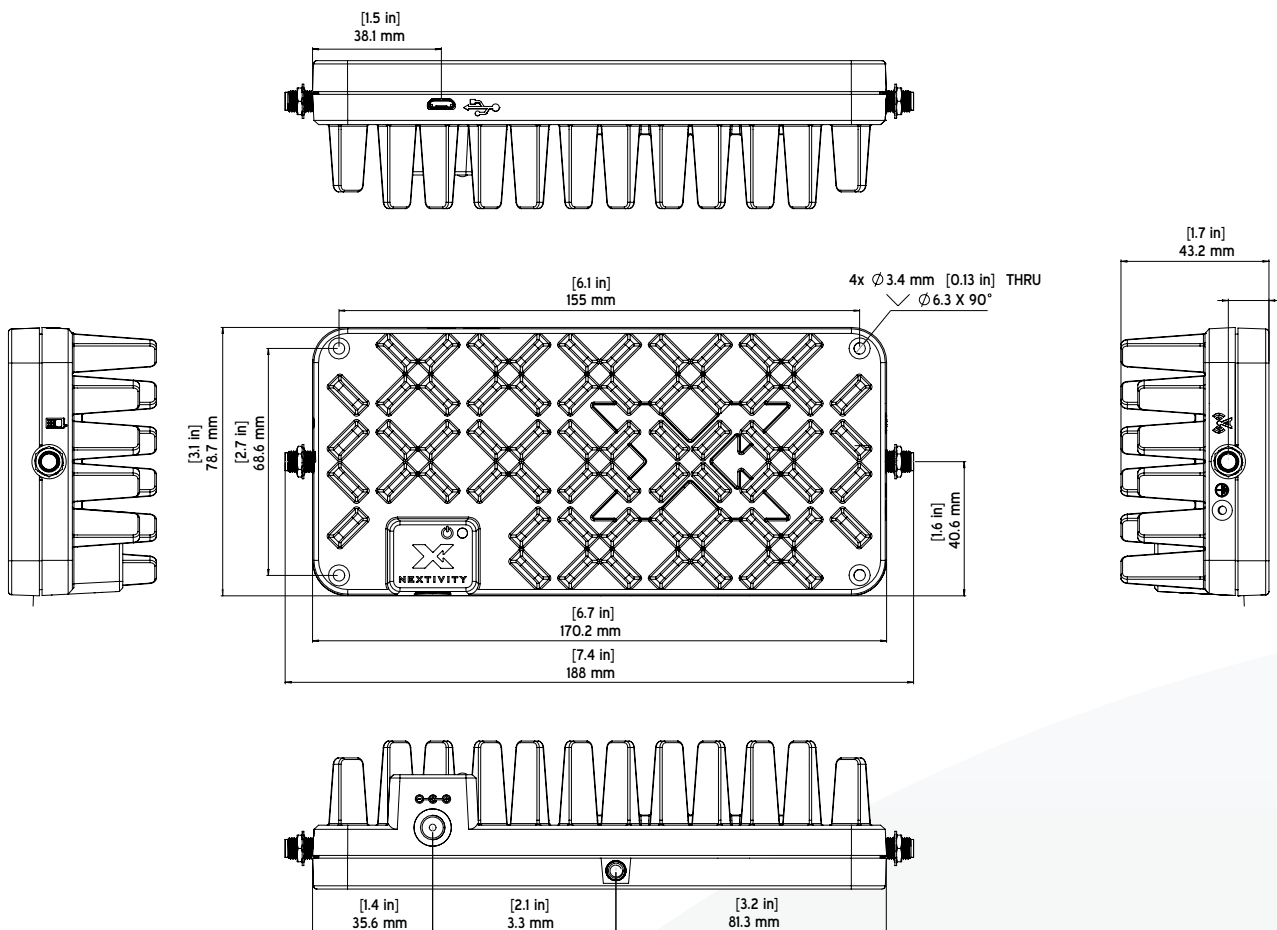
ROAM R41 is compatible with a wide range of bands to give you peace of mind that the system will boost your carrier's signal. And if your friends or family use a different mobile network operator, through the Nextivity WAVE App you can easily switch what carrier to boost depending on location and coverage challenges.

## Unmatched Performance

Equipped with the latest 4th generation Nextivity proprietary IntelliBoost chip, ROAM R41 features the same technology that is used in our enterprise cellular coverage solutions. This gives you industry-leading signal gain that ensures you can always make a call, send a text, listen to music, or stay on the right route while in your car or boat.



## CEL-FI ROAM R41 Main Unit Outline



## 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      | 20                  |
| 7               | 2620-2690      | 2500-2570    | 20                  |
| 8               | 925-960        | 880-915      | 15                  |
| 20              | 791-821        | 832-862      | 20                  |
| 26              | 859-894        | 814-849      | 20                  |
| 28L             | 758-788        | 703-733      | 20                  |



## Specifications

| CEL-FI ROAM R41                                      |   |
|--|---|
| Frequency Bands                                      | 1/3/5/7/8/20/26/28L                                     |
| 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 authorised operator                    | PLMN-IDs  |
| Duplex Modes   | FDD   |
| # of Relay Bands (MHz max.)                          | 1   |
| Relay Bandwidth (MHz max.)                           | 20  |
| Output Downlink Power (All Bands) (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  |
| 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)                                |
| Factory Debug only                                   | 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 18 AWG                 |
| Power Supply Cable                            | 16.3 (5)  |
| Power Supply Cable Length (ft (m))            | 6 ft (1.8 m)                                      |
| 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) 1.08 (0.49) |
| Main Unit Weight (lbs (kg))                   | 19.4 lbs (8.80 kg)                                |

## Ordering Information

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Model                             | R41-YB-003                            |
| Region                            | EMEA/APAC                             |
| Frequency Bands                   | 1/3/5/7/8/26/28L                      |
| Box Contents                      | Main Unit                             |
|                                   | 1x Automobile Auxiliary Power Adapter |
|                                   | 4x Mounting Screws                    |
|                                   | 2x Mounting Velcro                    |
|                                   | Quick Installation Guide              |
| Kit Shipping Dimensions (in (mm)) | 8.47 x 3.94 x 3.19 (215 x 100 x 81)   |
| Kit Shipping Weight (lbs (kg))    | 1.74 (0.79)                           |