



RPT-9000 Cellular Repeater



The RPT-9000 supports GSM, CDMA, WCDMA, EDGE, EVDO, iDEN, HSPA+, UMTS, LTE and all cellular standards.

Typical applications include filling valleys, rural areas and coverage within buildings.

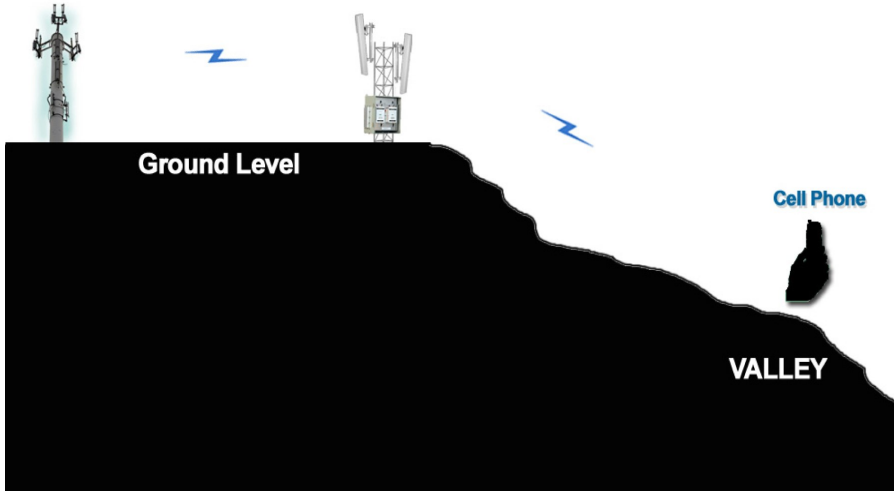
It is proudly manufactured in North America to the highest engineering and component standards providing the most powerful and reliable cellular repeater in its class.

With an optional Hybrid feature, the RPT-9000 can extend RF over Fiber Optic cable to a fill antenna allowing access around large obstacles like mountains, canyons and hills.

- Single band carrier class cellular repeater
- Extends Voice, SMS and Data services from existing cell towers
- Works with all North American and International mobile carriers
- Supports 600*, 700, 800, 850, 900, 1700, 1800, 1900, 2100, 2300* **or** 2600 MHz bands
- Provides cell service in hard to reach areas like underground parking garages, tunnels, tall buildings, metal structures and malls
- Simple and rapid deployment
- No programming knowledge required
- Visual LED indicators for signal strength verification and antenna alignment
- Manual switches for individual gain control on both uplink and downlink sides
- 700, 850 & 1900 MHz FCC/IC certified.
- Low power requirements - 50 watts
- Extreme temperature range from -30° to +50° Celsius
- Hardened NEMA enclosure with AC or DC power supply
- 2 Year Warranty

* NA 600 & 2300 under development

Cell Tower



The RPT-9000 can easily address low lying valleys with bad reception or dead spots.

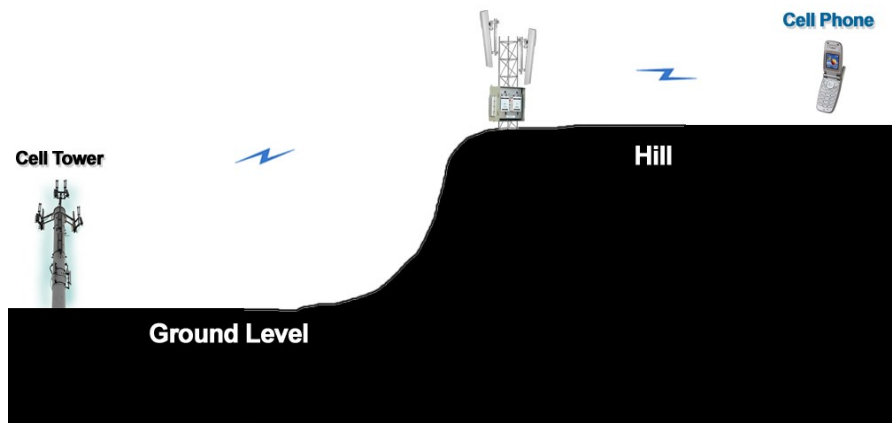
In this example, the cell tower is sitting above the valley where a community or neighborhood may reside. The cellular signal will travel across and over the valley, but unable to travel downwards with a reliable signal, if any at all.

The RPT-9000 will receive a signal from the cell tower, regenerate to full power and transmit at a downward angle to local users in the valley area.

The RPT-9000 can easily address high lying areas or hills with bad reception or dead spots.

In this example, the cell tower is sitting below the hill where a community or neighborhood may reside. The cellular signal will travel toward the top of the hill, but incapable of traveling horizontal across the top for a reliable signal, if any at all.

The RPT-9000 will receive the signal from the cell tower, regenerate to full power and transmit at the correct angle to local users at the top of the hill.

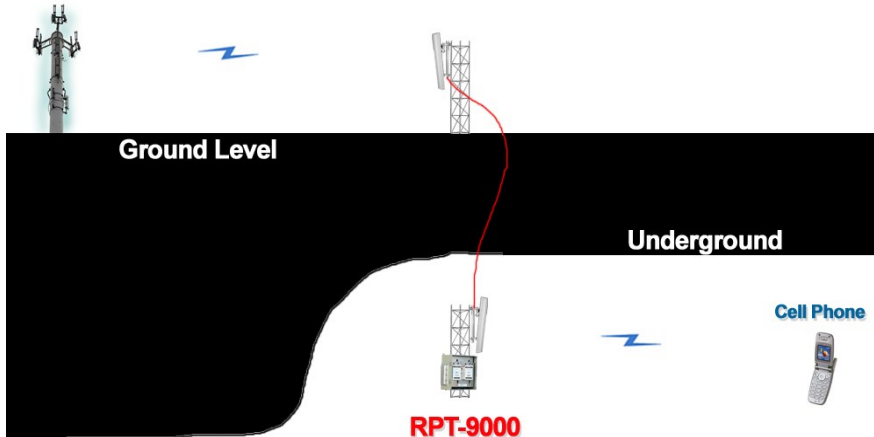


The RPT-9000 can easily address underground parking, tunnels and mines with bad reception or dead spots.

In this example, the cell tower is sitting above ground and unable to penetrate the underlying structure which may be a parking lot, tunnel or mine.

The RPT-9000 above ground donor antenna will receive a signal from the cell tower, pass underground through a cable, regenerate to full power and transmit with a fill antenna to the underground users.

Cell Tower





The alternative to Satellite, Wi-Fi and Phone lines. Providing emergency voice services to rural, underground or hard to reach places can be a challenge. A popular choice is satellite which can be effective in certain applications except for the high cost, complex technical equipment and restrictions not inherent in cellular services. The use of Wi-Fi has many limitations including distance. Traditional phone lines will not solve the problem since they are fixed and not mobile. The same is true for traditional microwave and ISM solutions. The obvious choice is to extend 2G/3G/4G cellular service where available and maintain all the features with the RPT-9000. With cellular services, the complex technology is hidden, you only require the cellular signal. The RPT-9000 regenerates a clear and strong signal.

Technical Specifications

600/700/800/850/900

1700/1800/1900/2100/2300/2600

Frequency Range:

663-698/617-652 MHz (B71 - USDD 600)
699-716/729-746 MHz (B12 - LSMH 700)
777-787/746-756 MHz (B13 - USMH 700)
703-748/758-803 MHz (B28 - APT 700)
806-821/851-866 MHz (B27 - SMR 800)
824-849/869-894 MHz (B5 - CLR 850)
880-915/925-960 MHz (B8 - GSM 900)

1710-1755/2110-2155 MHz (B4 - AWS-1 1700)
1710-1785/1805-1880 MHz (B3 - DCS 1800)
1850-1910/1930-1990 MHz (B2 - PCS 1900)
1920-1980/2110-2170 MHz (B1 - IMT 2100)
2305-2315/2350-2360 MHz (B30 - WCS 2300)
2500-2570/2620-2690 MHz (B7 - IMT-E 2600)

Passband Gain:

95 dB

90 dB

Passband Ripple:

± 2.5 dB Maximum

± 2.5 dB Maximum

Channel Ripple:

2 dB Maximum

2 dB Maximum

EVM:

< 3%

< 3%

Absolute Delay:

< 2 μs

< 2 μs

Rx Noise Figure@Max Gain:

3.7 dB Typical

4.0 dB Typical

IMD 2 Tone :

51 dBc Typical

51 dBc Typical

IMD 4 Tone :

48 dBc Typical

48 dBc Typical

Power Output:

+30 dBm RMS

+30 dBm RMS

RF Connectors:

50 Ω N Type, Female

50 Ω N Type, Female

Maximum VSWR:

1.5 : 1

1.5 : 1

Manual Gain Control:

50 dB in 2dB Steps

50 dB in 2dB Steps

Spurious Outputs:

55 dBc Max

55 dBc Max

Power Supply:

24 VDC @50W, 90-260 VAC

24 VDC @50W, 90-260 VAC

Operating Temperature:

-30°C to +50°C

-30°C to +50°C

Unit Size :

14.5 x 16.5 x 11.5"
37 x 42 x 29 cm

14.5 x 16.5 x 11.5"
37 x 42 x 29 cm

Weight:

52 lbs, 23 kg Typical

52 lbs, 23 kg Typical

Enclosure Type

NEMA 4A, 12

NEMA 4A, 12

For more information:

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