

RPT-9000H Hybrid Cellular Repeater



The RPT-9000H Hybrid is a carrier class cellular extender and repeater for GSM, CDMA, WCDMA, 3G UMTS, 4G LTE*, iDEN, TDMA and AMPS. The unit can expand cellular coverage without adding a new cellular tower. In most applications, this can save up to 90% of a new tower installation. Distances away from the cell tower can be up to ~ 60Km/37 miles or more**.

With the integrated 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.

Typical applications include filling valleys and shadow areas. Cellular extension to rural areas, underground tunnels, large buildings, emergency areas and just about any location with limited or non existent cellular reception.

The RPT-9000H is proudly manufactured in North America to the highest engineering and component standards providing the most powerful and reliable cellular repeater in its class.

- Standard RPT-9000 with the integrated FPT-5000 fiber optic RF extender
- Used in pairs to extend the antenna distance around hills and mountains using a single strand of single mode fiber optic cable
- Extends GSM, CDMA, WCDMA, 3G UMTS, 4G LTE*, iDEN, TDMA and AMPS cellular service from existing cell towers up to 60Km/37 miles or more**
- Extends cellular Voice and Data services
- Saves up to 90% of the cost for a new cell tower
- Allows areas with weak or dead spot signals to have full cellular service
- Provides hard to reach service like underground tunnels, parking garages, tall buildings, malls and valleys
- Simple and rapid deployment
- No programming knowledge required
- Supports 700, 800, 850, 900, 1800, 1900, 2100, 2300 **or** 2600 MHz cellular service.
- 850 and 1900MHz FCC and IC certified
- Power output - +30dBm RMS
- Hardened NEMA enclosure with AC or DC power supply
- Low power requirements - 50 watts
- Extreme temperature capability / -30° to +60° Celsius
- Simple visual LED indicators for aligning antennas
- Simple attenuation switches for amplification settings
- 2 Year Warranty

* 700 LTE and 2100 AWS under development

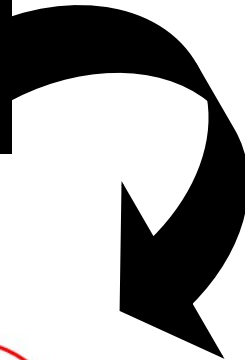
** Distance is dependent on cell tower configuration timing



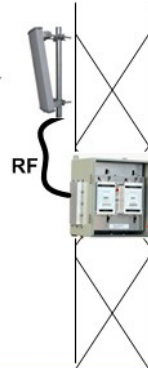
RPT-9000
+ **FPT-5000**



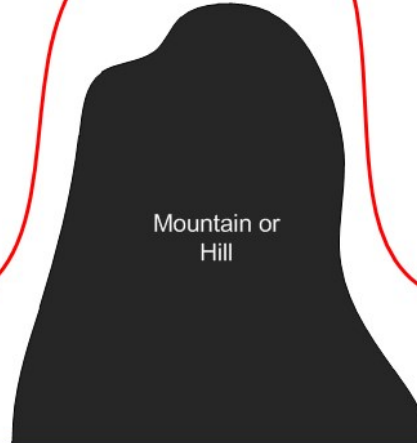
= RPT-9000 HYBRID



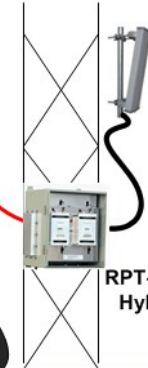
Cellular Tower
GSM, CDMA, WCDMA
3G, 4G or AMPs



RPT-9000
Hybrid



Mountain or
Hill



RPT-9000
Hybrid



**RPT-9000 Hybrid Cellular Repeater
for Antenna Extension around a mountain or hill**



Typical RPT-9000 Hybrid applications include filling valleys and shadow areas that have large obstacle in the path such as a mountain, canyon or hill. With the FPT-5000 capability integrated on one side of the RPT-9000, fiber optic cable can be utilized to extend the antennas up to 10Km apart. Cellular extension to rural areas, underground tunnels, large buildings, emergency areas and just about any location with limited or non existent cellular reception.



RF Technical Specifications

Frequency Range:

Passband Gain:

Passband Ripple :

Channel Ripple:

EVM:

Absolute Delay:

Rx Noise Figure@Max Gain:

IMD 2 Tone :

Power Output:

RF Connectors :

Max SWR (In/Out):

Manual Gain Control:

Spurious Outputs:

Power Supply:

Operating Temperature:

Unit Size :

Weight:

Enclosure Type

700/800/850/900 MHz

703-733/758-788 MHz (LTE)
806-821/851-866 MHz (iDEN 800)
824-849/869-894 MHz (Cell 850)
890-915/935-960 MHz (GSM 900)

95 dB

± 2.5 dB Maximum

2 dB Maximum

< 3%

< 2 µs

3.7 dB Typical

43 dBc Typical

+30 dBm RMS

50 Ω N Type, Female

1.5 : 1

50 dB in 2dB Steps

55 dBc Max

24 or 28 VDC @50W, 90-260 VAC

-30°C - +60°C

14.5 x 16.5 x 11.5"
36 x 41 x 29 cm

52 lbs, 23 kg Typical

NEMA 4A, 12

1800/1900/2100/2300/2600 MHz

1710-1785/1805-1880 MHz (GSM 1800)
1850-1910/1930-1990 MHz (PCS 1900)
1920-1980/2110-2170 MHz (UMTS 2100)
2305-2315/2350-2360 MHz (WCS 2300)
2500-2570/2620-2690 MHz (IMT-E 2600)

90 dB

± 2.5 dB Maximum

2 dB Maximum

< 3%

< 2 µs

4.0 dB Typical

43 dBc Typical

+30 dBm RMS

50 Ω N Type, Female

1.5 : 1

50 dB in 2dB Steps

55 dBc Max

24 or 28 VDC @50W, 90-260 VAC

-30°C - +60°C

14.5 x 16.5 x 11.5"
36 x 41 x 29 cm

52 lbs, 23 kg Typical

NEMA 4A, 12

Fiber Technical Specifications

Frequency Range:

RF Gain at 0 dB Optical Loss:

Gain Accuracy:

Gain Flatness Across Band:

Gain Slope:

Gain Stability Over Temp. Rx/Tx:

Input TOI @ 1.2 GHz:

Noise Figure @ 1.2 GHz:

Carrier to Noise Ratio @ 1.2 GHz:

Optical Connector:

Wavelength:

800-2100MHz

0.4 dB/km

± 1 dB

± 1 dB

< 0.7 dB / 36 MHz

< ± 3 dB Over Operating Temp. Range

±3 dB

< 36 dB, 0 dB optical loss

< 65 dB, 0 dB optical loss

SC Green Angled Polished Connector (APC), other connector types available.

Simplex Single Mode Glass Fiber (9/125)

1310/1550 ± 20nm

For more information:

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