



RPT-9000DH Cellular Repeater



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

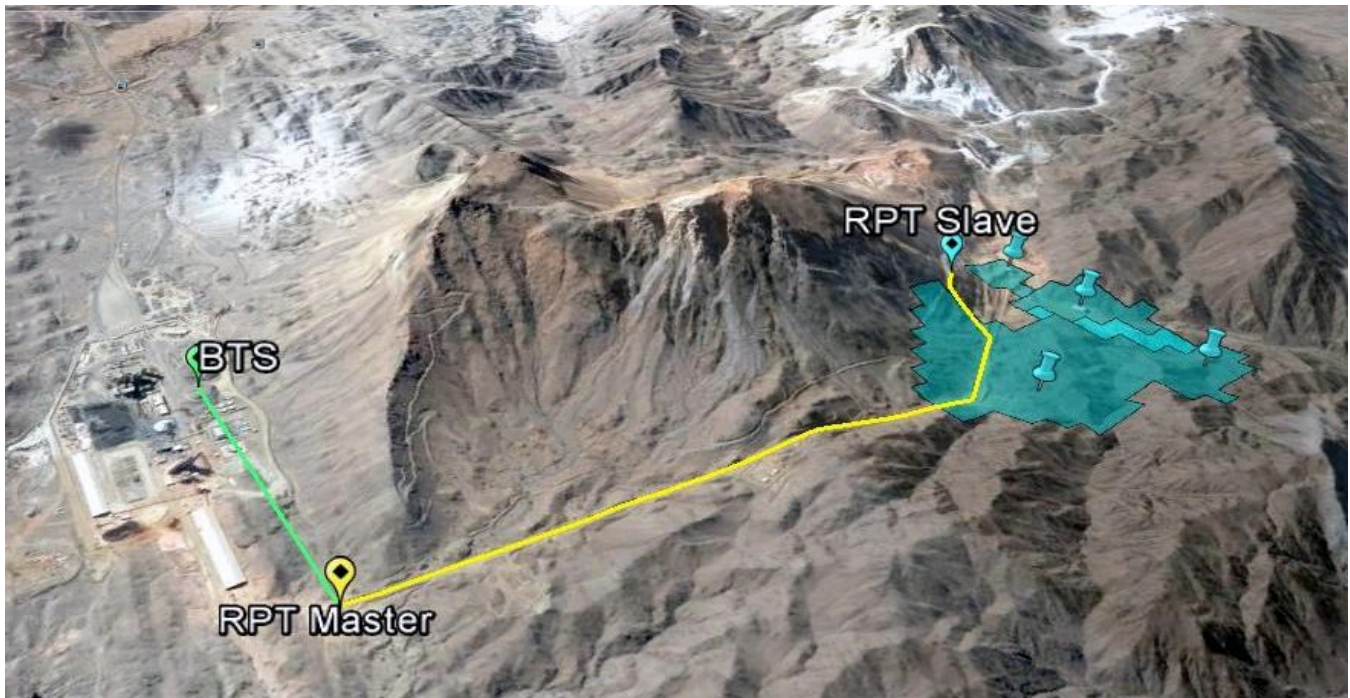
With the integrated Hybrid feature, the RPT-9000DH can extend RF over Fiber Optic cable to a fill antenna allowing access around large obstacles like mountains, canyons and hills.

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

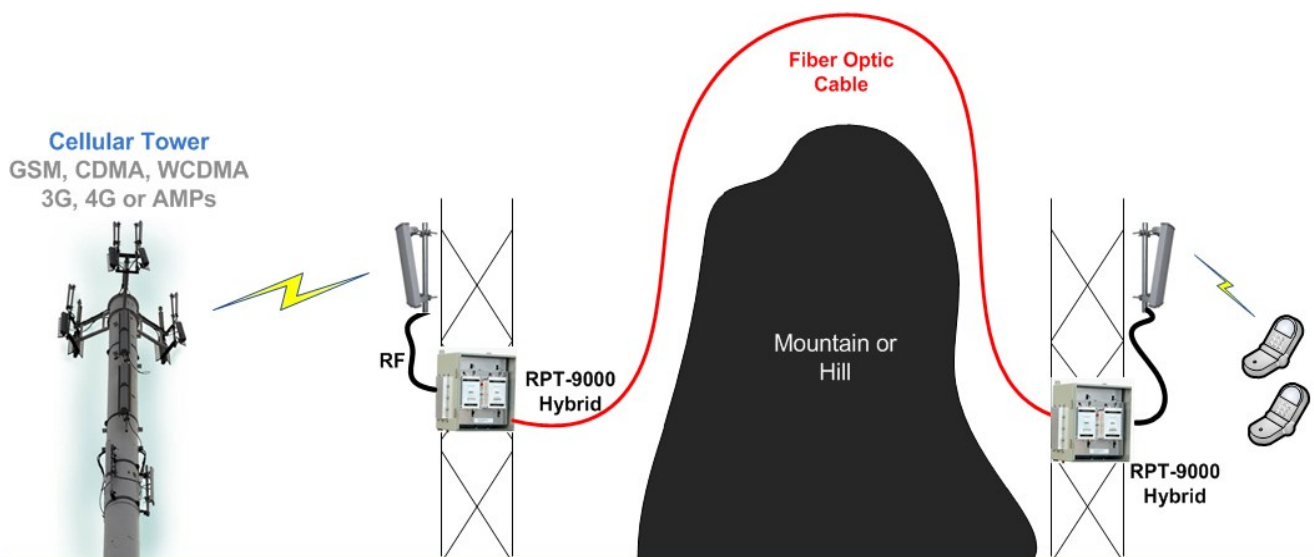
It is proudly manufactured in North America to the highest engineering and component standards providing the most powerful and reliable cellular repeater in its class.

- Dual band carrier class cellular repeater
- Hybrid design with single mode fiber optic cables between master and slave units
- 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 (**choose 2 of the above**)
- Provides cell service between hard to reach areas obstructed by mountains
- Visual LED indicators for signal strength verification and antenna alignment
- Manual switches for individual gain control on both uplink and downlink sides
- 850 and 1900 MHz FCC and IC certified.
- Low power requirements - 80 watts
- Hardened NEMA enclosure with AC or DC power supply
- 2 Year Warranty

* NA 600, 700, 1700 & 2300 under development (Q1 2019)



Typical RPT-9000DH applications include filling valleys and shadow areas that have large obstruction in the path such as a mountain or hill. With the Hybrid capability integrated into the master and slave units, two (2) strands of single mode fiber optic cable up to ~ 20 Km is used to extend cellular signal to the area fill antennas.



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



RF Technical Specifications

600/700/800/850/900

1700/1800/1900/2100/2300/2600

Frequency Range:

663-698/617-652 MHz (USDD 600)
699-716/729-746 MHz (LSMH 700)
777-787/746-756 MHz (USMH 700)
806-821/851-866 MHz (SMR 800)
824-849/869-894 MHz (CLR 850)
880-915/925-960 MHz (GSM 900)

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

Max SWR (In/Out):

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 @80W, 90-260 VAC

24 VDC @80W, 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"
36 x 41 x 29 cm

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36 x 41 x 29 cm

Weight:

52 lbs, 23 kg Typical

52 lbs, 23 kg Typical

Enclosure Type

NEMA 4A, 12

NEMA 4A, 12

Fiber Technical Specifications

Frequency Range:

800-2100MHz

RF Gain at 0 dB Optical Loss:

0.4 dB/km

Gain Accuracy:

± 1 dB

Gain Flatness Across Band:

± 1 dB

Gain Slope:

< 0.7 dB / 36 MHz

Gain Stability Over Temp. Rx/Tx:

< ± 3 dB Over Operating Temperature Range

Input TOI @ 1.2 GHz:

±3 dB

Noise Figure @ 1.2 GHz:

< 36 dB, 0 dB optical loss

Carrier to Noise Ratio @ 1.2 GHz:

< 65 dB, 0 dB optical loss

Optical Connector:

Two (2) SC Green Angled Polished Connectors (APC), other connector types available.
Simplex Single Mode Glass Fiber (9/125)

Wavelength:

1310/1550 ± 20nm

For more information:

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