

Telcosat Inc

Telephone 403 291 4031

RPT-900 Cellular Repeater



The RPT-900 is a carrier class cellular booster and repeater for 2G GSM, CDMA, WCDMA, 3G, 4G LTE, iDEN. The unit can expand cellular coverage without adding a new cellular tower. In most applications this can save up to 90% of a new cell tower installation. Distances away from the cell tower can be up to ~ 60Km/37 miles or more.

The RPT 900 cellular booster will not only give you quality cell phone reception where you need it, but will also extend the life of your battery.

The RPT-900 is proudly manufactured in North America to the highest engineering and component standards and is the most powerful and reliable cellular repeater in its class.

With the optional RF Over Fibre hybrid feature, the RPT-900 uses fibre optic cable to get cell phone signal around large obstacles such as mountains, canyons and hills.

The fibre optic solution is also a great alternative in buildings where thick coax cables might be visible and not aesthetically pleasing.

Extends GSM, CDMA, WCDMA, 3G, 4G LTE, cellular service from existing cell towers up to 60Km/37 miles or more

Extends cellular Voice and Data services.

The RPT 900 removes those annoying effects of weak or dead spot signals to provide you with full cellular service.

You can have cell phone reception in hard to reach areas such as tunnels, underground parking garages, tall buildings, malls, large buildings, and valleys and just about any location with limited or non existent cellular reception.

Simple and rapid deployment.
No programming knowledge required.
Supports 850 MHz cell service.

850 MHz FCC and IC certified.

Power output - +30dBm RMS.

Low power requirements - 50 watts. AC or DC.

Operating temperature -30° to +60° Celsius.

Out Door Weather Proof Enclosure.

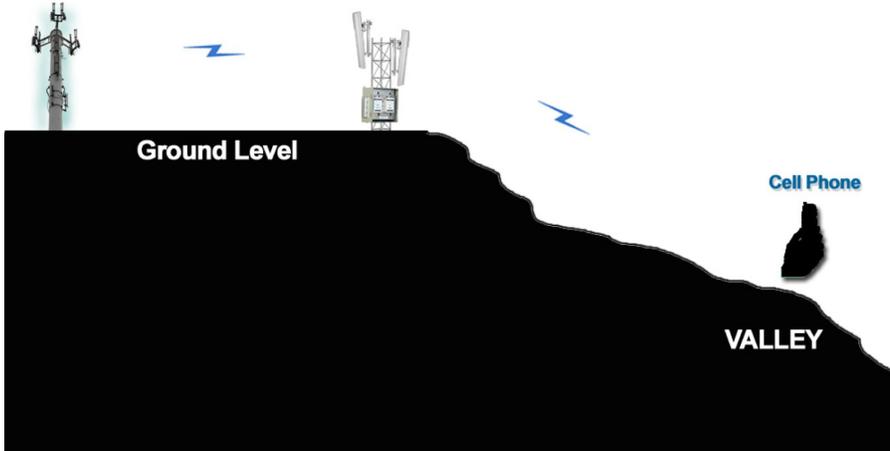
Simple visual LED indicators for aligning antennas.

Simple attenuation switches for amplification settings.

2 Year Warranty.



Cell Tower



The RPT-900 can easily provide cell phone signal to low lying valleys with bad reception or dead spots.

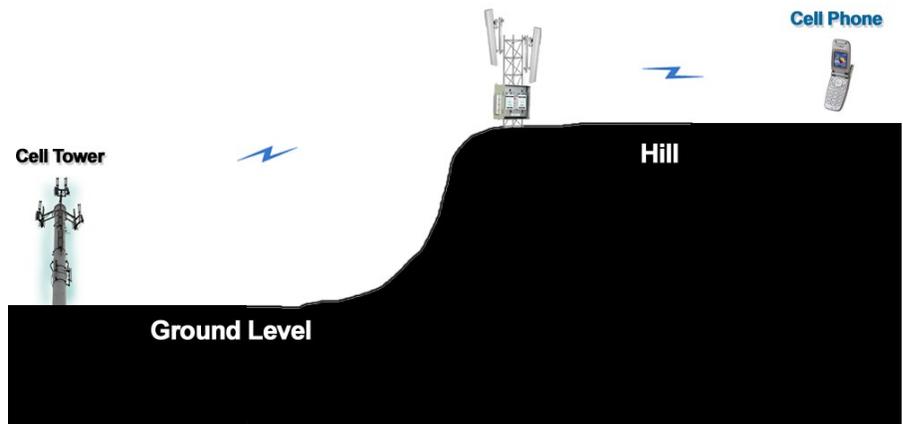
In this example, the cell tower is sitting above the valley where a community or neighborhood may reside. The cellular signal will travel across and over the valley, but unable to travel downwards with a reliable signal, if any at all.

The RPT-900 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-900 can easily provide cell phone service to 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-900 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-900 can provide cell phone service to 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-900 above ground antenna will receive a signal from the cell tower, transmit the signal underground through a cable to the booster where it is regenerated to full power and transmitted to one or more antennas around the underground facility.



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. With cellular services, the complex technology is hidden, you only require the cellular signal. The RPT-900 regenerates a clear and strong signal.



The use of Wi-Fi has many limitations including distance. The same is true for traditional microwave and ISM solutions. Traditional phone lines are not mobile and are therefore limited by the position of the phone. The obvious choice is to extend cellular service and maintain all the features with the RPT-900.

Technical Specifications

RPT 900 (850 MHz Booster)

Frequency Range:	824-849/869-894 MHz (Cell 850)
Passband Gain:	95 dB
Passband Ripple :	± 2.5 dB Maximum
Channel Ripple:	2 dB Maximum
EVM:	< 3%
Absolute Delay:	< 2 µs
Rx Noise Figure@Max Gain:	3.7 dB Typical
IMD 2 Tone :	43 dBc Typical
Power Output:	+30 dBm RMS
RF Connectors:	50 Ω N Type, Female
Maximum VSWR:	1.5 : 1
Manual Gain Control:	50 dB in 2dB Steps
Spurious Outputs:	55 dBc Max
Power Supply:	24 or 28 VDC @50W, 90-260 VAC
Operating Temperature:	-30°C - +60°C
Unit Size :	14.5 x 16.5 x 11.5" 36 x 41 x 29 cm
Weight:	52 lbs, 23 kg Typical
Enclosure Type	NEMA 4A, 12

For more information:

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