

# Telcosat Inc

## Telephone 403 291 4031

### RPT-1900 Cellular Repeater



**The RPT-1900 is a carrier class mobile phone signal booster and repeater for GSM, CDMA, 3G 4G LTE.** The unit can expand mobile signal coverage without adding a new mobile tower. In most applications this can save up to 90% of a new cell tower installation. Distances away from the mobile tower can be up to ~ 60Km/37 miles or more.

**The RPT 1900 mobile phone booster will not only give you quality mobile phone reception where you need it, but will also extend the life of your battery.**

**The RPT-1900 is proudly manufactured in Canada** 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-1900 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 and LTE mobile service from existing mobile towers up to 37 miles /60Kmor more

Extends cellular Voice and Data services.

The RPT 1900 removes those annoying effects of weak or dead spot signals to provide you with full cellular service.

You can have mobile 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 mobile reception.

Simple and rapid deployment.  
No programming knowledge required.  
Supports 1800 MHz cell service.

Power output - +30dBm RMS.

Low power requirements - 50 watts. AC or DC.

Operating temperature -30° to +60° Celsius.

Out Door Weather Proof Enclosure.

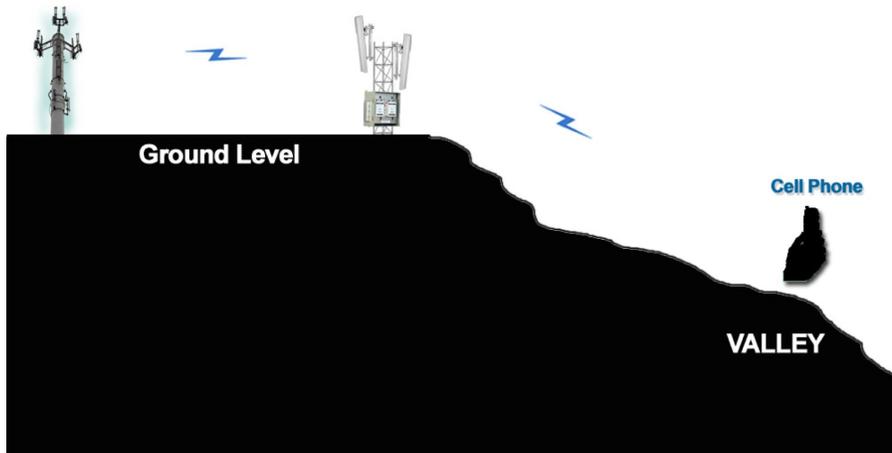
Simple visual LED indicators for aligning antennas.

Simple attenuation switches for amplification settings.

2 Year Warranty.



Cell Tower



**The RPT-1900 can easily provide cell phone signal to low lying valleys with bad reception or dead spots.**

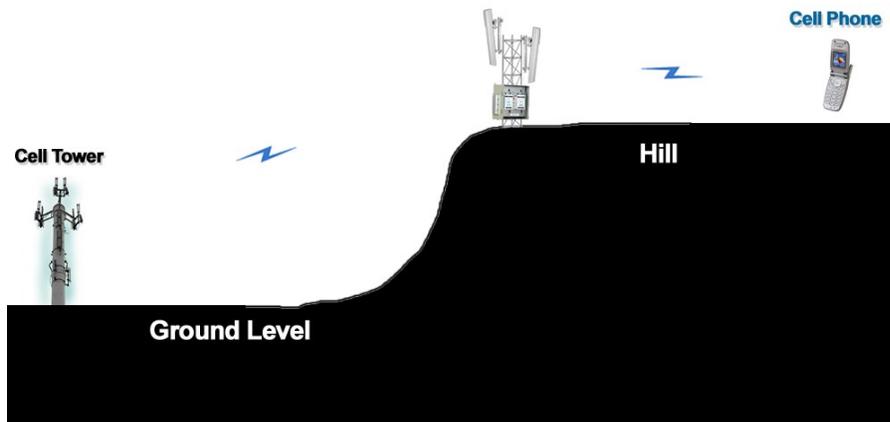
In this example, the mobile tower is sitting above the valley where a community or neighborhood may reside. The mobile signal will travel across and over the valley, but unable to travel downwards with a reliable signal, if any at all.

The RPT-1900 will receive a signal from the mobile tower, regenerate to full power and transmit at a downward angle to local users in the valley area.

**The RPT-1900 can easily provide mobile phone service to high lying areas or hills with bad reception or dead spots.**

In this example, the mobile tower is sitting below the hill where a community or neighborhood may reside. The mobile 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-1900 will receive the signal from the mobile tower, regenerate to full power and transmit at the correct angle to local users at the top of the hill.



**The RPT-1900 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-1900 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-1900 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-1900.

### Technical Specifications

### RPT 1900 (1900 MHz Booster)

<b>Frequency Range:</b>	1850-1910/1930-1990 MHz (PCS 1900)
<b>Passband Gain:</b>	90 dB
<b>Passband Ripple :</b>	± 2.5 dB Maximum
<b>Channel Ripple:</b>	2 dB Maximum
<b>EVM:</b>	< 3%
<b>Absolute Delay:</b>	< 2 µs
<b>Rx Noise Figure@Max Gain:</b>	4.0 dB Typical
<b>IMD 2 Tone :</b>	43 dBc Typical
<b>Power Output:</b>	+30 dBm RMS
<b>RF Connectors:</b>	50 Ω N Type, Female
<b>Maximum VSWR:</b>	1.5 : 1
<b>Manual Gain Control:</b>	50 dB in 2dB Steps
<b>Spurious Outputs:</b>	55 dBc Max
<b>Power Supply:</b>	24 or 28 VDC @50W, 90-260 VAC
<b>Operating Temperature:</b>	-30°C - +60°C
<b>Unit Size :</b>	14.5 x 16.5 x 11.5" 36 x 41 x 29 cm
<b>Weight:</b>	52 lbs, 23 kg Typical
<b>Enclosure Type</b>	NEMA 4A, 12

**For more information:**

**Telcosat Inc**

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