

**Specifications for the Telcosat Repeater system CDMA/GSM Model RPT900**

Frequency Range:	Down link 824-849MHz / Up-link 869-894MHz
Overall systems Gain	(3dB Pass Band):110dB min. for 15db S/N
Pass band ripple:	+/- 2.5dB max. within 3dB Pass Band
Channel ripple:	.2dB max.
Group Delay Variation	90% of 3db Bandwidth typical: 65 nsec
Absolute Delay:	Less then 2. Micro sec.
Phase linearity	90% of 3 dB Bandwidth: typical 9.2 deg
Rx Noise figure @ maximum Gain:	3.7dB typical
IMD 2 tone :	51 dBc typical
IMD 4 tone:	48 dBc typical
Power output @ 1dB gain compression:	+ 30dBm RMS ( up and down link)
Antenna Impedance Rx and TX :	Z= 50 ohms
Max SWR in/out:	1.5 to 1 max
Manual Gain Control user enable:	50dB total in 2db steps (Nominal Passband gain dB=95dB)
Spurious outputs:	55dBc max
Power Supply:	24VDC/55Watts or 90 to 260 AC / 50 Watts consumption
Operating Temperature	-40 C to+60 C
RF Connectors:	N- Type Female
Mechanical Specifications:	Size: 14.5" x 16.5" x 11.5" 36 x 41 x 29 cm
Weight:	50 pounds/ 23Kg typical
Enclosure type:	NEMA 4A, 12

Nominal Pass-band Gain dB= 95dB  
 Nominal band width Uplink 824/849 MHz = 25MHz  
 Nominal band width Down-Link 869/894MHz = 25MHz  
 Input and Output Antenna Impedance = 50 ohms  
 Rated mean out-put power = +30dBm

FCC & Industry Canada Certified



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Brochure  
 RPT900  
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**Cellular Coverage**

**Extend your cellular coverage by miles. Fill the Valleys and shadow areas with full cellular service.**

**Pick up cell towers from over 60 miles away.(CDMA)**

**Cover the rural high-ways and remove those annoying dropped calls.**

**Provide cellular coverage under ground, in tunnels and large buildings.**

**HIGH EFFICIENCY, CONSUMES ONLY 50 WATTS OF POWER.**

**OPERATES ON 24V DC OR 120/240 VOLTS AC**

**CELLULAR REPEATERS FOR THE WIRELESS INDUSTRY.**

**Telcosat Inc**

**Cellular Repeaters**

Industry Canada

&

FCC Certified.



**Warranty 2 Years for Permanent Installations**



**MODEL RPT 900**

The RPT 900 is fast and easy to install. No complicated computer hook up to set the gain and antenna alignment. Simply align the antenna to the cell tower by using the visual LED signal meter built into the Repeater. Adjust your repeater to the minimum power level required.

There is no such thing as a perfect cellular network. Everything from weak signals, underground car parks, tunnels, shopping malls, multi-storey buildings, hills and valleys can cause "dead spots" resulting in dropped calls.

The new Telcosat Repeater series RPT900 is a second generation full band repeater. The Repeater has been designed to accommodate the required lower signal levels found in CDMA systems in the range of -100dBm to -115dBm. Telcosat Inc. can tailor your cellular Repeater to your specifications .

Our engineers designed the RPT900 using a modular concept. This means the major components, such as the power amplifiers are individual amplifiers and the UPLINK/DOWN LINK up converter IF boards are also separate. Each separate PCB board is housed in an Aluminium enclosure that is machined from a solid block of aluminium.



Telcosat Repeaters are Engineered and manufactured in Canada. We do not use offshore manufacturing.

All circuit boards are individually inspected prior to assembly. Each repeater is also individually tested and calibrated, then a 48 hour burn in time is performed on each unit. After the 48 hour burn in time we verify the calibration of the repeater. This level of quality and testing allows Telcosat Inc to give our clients a full 2 years warranty on parts and labour.

Telcosat Inc has acquired a lot of experience in the deployment of Cellular Repeaters. We invite our potential clients to contact us for technical assistance and we will share our knowledge with the client to make their project successful.

**WARRANTY 2 YEARS PARTS & LABOUR**  
Permanent Installations Only

**Telcosat Inc**

**Telcosat Repeaters are currently operating on the following Networks**

Verizon Wireless  
Telus Mobility  
Dryden Telecom  
T-Mobile  
Rogers Wireless  
Bourdex Telecom Nigeria

