

Winnipeg Dish Size and Aiming Information

Correct size of your dish is the most important factor to gaining perfect reception.

The T-5 Satellite poses the greatest amount of confusion here in Winnipeg. The T-5 satellite has transponders that have different power and signal levels. The problem is intensified because the broadcaster Globecast changes programmers and transponders on a regular basis--your favorite channel could be on a strong transponder today only to be put on a weaker transponder tomorrow. The only technical solution is to design for the worst case. That is size the dish for the weakest transponder not the strongest. Many Winnipeg installers have sized for the strongest signals on a clear day. SatmanCanada.com sizes for the weakest signal on a cloudy day. Therefore we sell a bigger dish for T-5. In order to get optimum signal from T-5 you need a 1 meter or 1.2 meter dish. A 78cm (31 inch) or a 83cm(33 inch) is simply insufficient to correctly do the job.

This problem can best be explained by the use of a contour map a standard tool used in broadcast engineering.

The purpose of this map is to show the user how will the signal is received. The value used is **EIRP** - Abbreviation for E ffective- I sotropic- R adiated- P ower. This value is a standard in all antenna calculations it is a mathematical logarithmic value.

You can use this chart to help find out what size dish you will need by looking at the footprint of the satellite your trying to receive. Just look at the footprint image for the satellite your wanting and find where you are on the map. Then take the EIRP value for that area and look for it on the chart and see what the recommended dish size is.

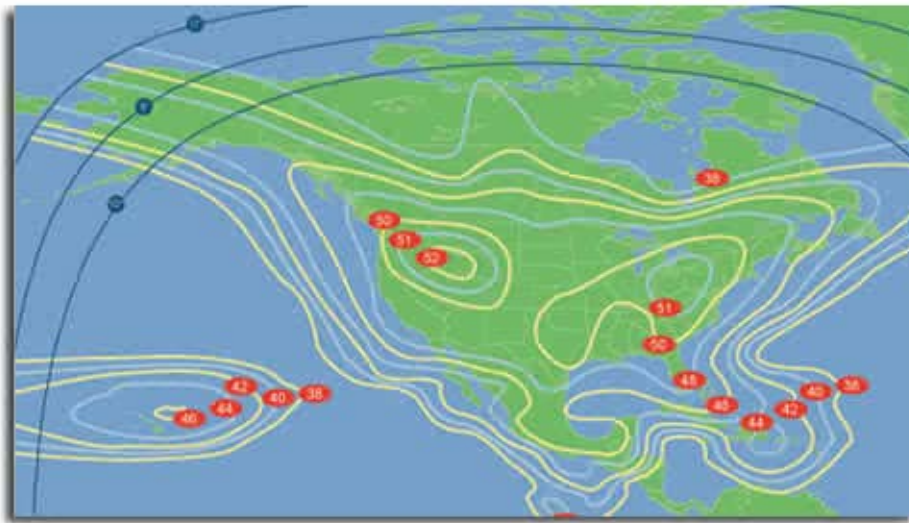
For example, I live in Winnipeg, Manitoba and I would like to view KU channels on Telstar 5, By looking at the footprint map I can see the EIRP value for my area is 44 which means I should have at least a 95 cm dish (36 inch dish).



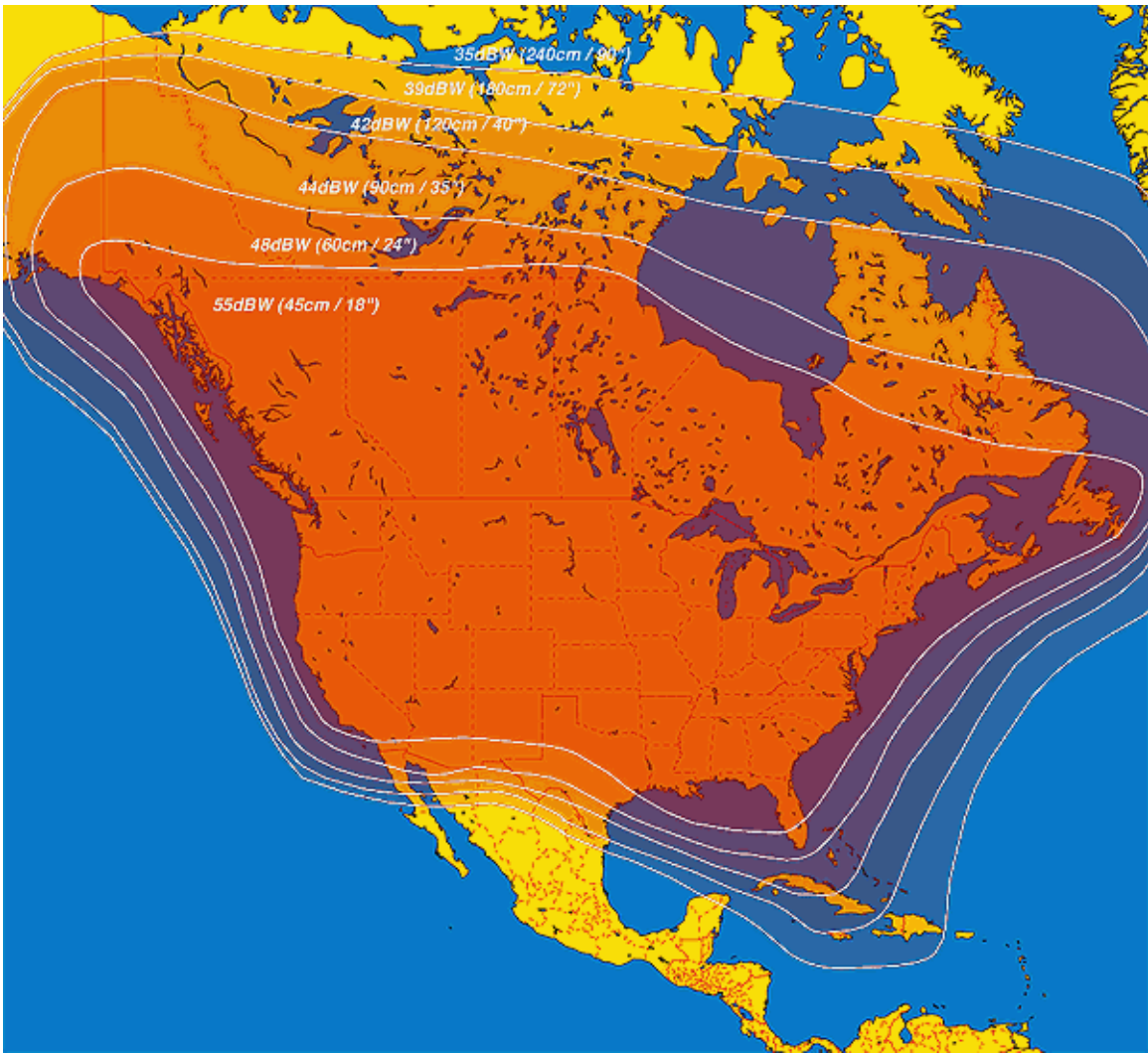
Ku-Band		
EIRP (dBW)	KU Dish Size (centimeter)	KU Dish Size (inches)
50.0	55	21.65

49.0	60	23.62
48.0	65	25.59
47.0	72	28.35
46.0	77	30.31
44.0	95	37.40
42.0	115	45.28
40.0	138	54.33
38.0	175	68.90

An additional problem is reception of RTP Portugal on AMC 4. It is also in the 44db EIRP range.



Nimiq is Very Wide and HOT here in Canada



Echostar's Pattern is Hot in the US

