

# Multibeam Earth Stations

## Simulsat C/Ku



### Features

- Up to 3 Times Improved Surface Tolerance Performance Over Standard Simulsat 5
- 4 Panel Design Allows For Improved Shippability - Lower Costs
- State-of-the-Art CNC Tooling (Computer Numerical Control)
- Laser Verified Tolerances
- Better Adjacent Satellite Performance
- Fixed Antenna With No Moving Parts to Service
- Commercial Quality Composite Construction
- Programming Movement: Due to Constant Satellite Programming Changes, Simulsat Users Can Add Another Feed Without Having to Purchase Another Antenna

### Summary

Simulsat C/Ku is the world's only antenna that can simultaneously receive signals from up to 35 satellites within a 70° view arc, with equal performance on each satellite. Since an increasing number of applications require multiple satellite reception, return on initial investment is immediate. Simulsat C/Ku is the only antenna you will need.

### Benefits

- Improved C & Ku Band Performance, Particularly Ku-Band
- Increases Revenue Stream - Allows Cable Operators to Pick Programming from 20,000-Plus Channels
- Lowers Overall Costs – Return on Initial Investment is Immediate
- Requires Less Space – Simulsat is the size of 2 Parabolics., Approximately 3 Parking Spaces
- Aesthetics - Curbs Real Estate Costs – Best Alternative to Antenna Farms
- Outperforms Parabolic Retrofits – Simulsat Receives, With Uniform Performance, Signals from all Satellites Within a 70 Degree View Arc.

### Applications

- Broadcasters
- Cable Television
- Universities/Distance Learning
- Television and Radio
- Military/Government
- Corporations

# Specifications: Simulsat C/Ku Multibeam Antenna

## ELECTRICAL

|                                   | C-Band        | Ku-Band           |
|-----------------------------------|---------------|-------------------|
| Frequency                         | 3.4 - 4.2 GHz | 10.95 - 12.75 GHz |
| Gain (+/- dB across the view arc) | 44.7 dBi      | 47 dBi            |
| Beamwidth                         | 1°            | 0.4°              |
| VSWR                              | 1.3           | 1.3               |
| Feed Cross-Pol. Isolation         | 35 dB         | 35 dB             |

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## MECHANICAL

|                              |                                      |
|------------------------------|--------------------------------------|
| Reflector Size               | 5.0 x 9.8 meters (16.5' x 31.6 feet) |
| Mount                        | Galvanized                           |
| Arc Coverage                 | 70 Degrees                           |
| Number of Simultaneous Feeds | Up to 35 Satellites                  |
| Reflector Construction       | Composite Fiberglass                 |
| Reflector Pieces             | 6 Sections                           |
| Mount Type (Fixed)           | Standard or High Mount               |

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## SHIPPING INFORMATION

|                                   |                      |
|-----------------------------------|----------------------|
| Shipping Weight                   | 2,805 kg (6,170 lbs) |
| Max Weight (Off-Load Ship Crates) | 1,318 kg (2,900 lbs) |

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## ENVIRONMENTAL

|                            |                                |
|----------------------------|--------------------------------|
| Wind Loading - Operational | 144.8 km/h (90 mph)            |
| Wind Loading - Survival    | 201.2 km/h (125 mph)           |
| Foundation Size (Area)     | 4.0 x 4.3 meter (13 x 14 feet) |

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## FOUNDATION CONCRETE

|                      |                    |
|----------------------|--------------------|
| 144.8 Km/h (90 mph)  | 7.5 m <sup>3</sup> |
| 201.2 km/h (125 mph) | 15 m <sup>3</sup>  |