

| Antenna                                  | 30” System  | 6.33’ HGA System  | 8.33’ HGA System   |
|--|---|---|--|
| Size                                     | 30” Diameter  | 76” Diameter  | 100” Diameter  |
| Weight                                   | 6 lbs. maximum  | 29 lbs.   | 47 lbs.  |
| Antenna Type                             | Phased Array Flat Plate   | Parabolic dish with linear horizontally polarized feed                  | Parabolic dish with linear horizontally polarized feed                   |
| Beam Width                               | 5.4 degrees (Nominal)   | 2.1 degrees maximum   | 1.7 degrees maximum  |
| Gain                                     | 30.5 dB   | 38 dB minimum   | 40 dB minimum  |
| 1st Side Lobe                            | -25 dB maximum referenced to main lobe  | -25 dB maximum referenced to main lobe                                  | -25 dB maximum referenced to main lobe                                   |
| Antenna Pedestal                         | 30” System  | 6.33’ and 8.33’ HGA Systems   |  |
| Size (Extended)                          | 23.5” high, 9.75” wide, 16.75” deep   | 27.5” high, 9.75” wide, 16.75” deep                                     |  |
| Weight                                   | 35 lbs. maximum   | 59 lbs. maximum   |  |
| Operating Temp.                          | +5 to +131 degrees F  | +5 to +131 degrees F  |  |
| Input Power                              | 115V, 60Hz  | 115V, 60Hz  |  |
| Azimuth Scan Range                       | 360 degrees   | 360 degrees   |  |
| Elevation Scan Range                     | -2 to +60 degrees   | -2 to +60 degrees   |  |
| Scan Rate                                | 1.87 , 3.75 , 7.5 RPM   | .93 , 1.87 , 3.75 RPM   |  |
| Scan Modes                               | Automatic, Sector, and RHI  | Automatic, Sector, and RHI  |  |
| Receiver/Transmitter WRT-701C            | For All Systems   |   |  |
| Size                                     | 7.72” high, 10.27” wide, 15.03” deep  |   |  |
| Weight                                   | 30 lbs. maximum   |   |  |
| Storage Temperature                      | -67 to +185 degrees F   |   |  |
| Operating Temperature                    | +5 to +131 degrees F  |   |  |
| Input Power                              | 115V, 400 Hz, single phase 300 watts dissipated power   |   |  |
| Cooling                                  | Provided by mount   |   |  |
| Signal Processor                         | Pulse Pair  |   |  |
| Ground Clutter Suppression               | Based on pulse-to-pulse amplitude signature recognition of Doppler spectrum width   |   |  |
| Max. Theoretical Precipitation Detection | 320 Nautical Miles (368.2 Statute/593 km)   |   |  |
| Max. Doppler Turbulence                  | 50 Nautical Miles (57.5 Statute/93 km)  |   |  |
| Mean Velocity Range                      | 50 Nautical Miles (57.5 Statute/93 km)  |   |  |
| Precipitation Detection                  | 5 Calibrated Levels: 20, 30, 40, 45, 50. (Window of 30 dBZ from a range of 60 dBZ) *  |   |  |
| Doppler Detection                        | Pulse Pair Variances: turbulence 5-12 meters per second (m/s) in 1 m/s increments. 4 bit mean velocity +/- 20 m/s in 2.5 m/s increments (15 levels) (Optional w/-405 R/T) |   |  |
| Operating Frequency                      | 5.44 GHz (Dual Crystal Control)   |   |  |
| Output Power                             | 200 watts peak (nominal)  |   |  |
| Pulse Repetition Frequency               | 181/362 precipitation, 1448 Doppler Modes   |   |  |
| Pulse Width                              | 2 to 20 microseconds, variable with selected ranges   |   |  |
| Safety Rating (maximum exposure)         | 30” < 2 mw/cm²; 6.33’ HGA < 0.4 mw/cm²; 8.33’ HGA < 0.23 mw/cm²   |   |  |
| Noise Figure                             | <5.0 dB   |   |  |
| Bandwidth                                | Variable with Pulse Width   |   |  |
| Sensitivity                              | -125 dBm (minimum discernable signal at 20 microseconds pulse width)  |   |  |
| IF Response                              | Linear  |   |  |
| R/T Mount                                | For All Systems   |   |  |
| Size                                     | 12.6” high, 10.3” wide, 17.5” deep  |   |  |
| Weight                                   | 4 lbs. maximum  |   |  |
| Input Power                              | 115V, 60 Hz for cooling fan 115 CFM   |   |  |
| Frequency Converter 500C                 | For All Systems   |   |  |
| Power Output                             | 500VA   |   |  |
| Output Voltages                          | 115 Nominal   |   |  |
| Output Frequency                         | 400 Hz fixed  |   |  |
| Radome                                   | 3.5’ Radome   | 8’ Radome   | 10’ Radome   |
| Size                                     | 41.25” high<br>Inner Diameter: 38.5”<br>Outer Diameter: 39.5”<br>Radius: 19.75”   | 89” high<br>Inner Diameter: 97”<br>Outer Diameter: 99”<br>Radius: 49.5” | 115” high<br>Inner Diameter: 126”<br>Outer Diameter: 128”<br>Radius: 64” |
| Weight                                   | 30 lbs.   | 225 lbs. (approximately)  | 300 lbs. (approximately)   |
| Riser                                    | N/A   | 6” high   | N/A  |
| Opening                                  | N/A   | 60” inner diameter  | 77.7” inner diameter   |
| Door                                     | N/A   | 34” x 31”   | 34” x 31”  |
| Paint                                    | Linear White High Gloss Gelcoat   | Linear White High Gloss Gelcoat   | Linear White High Gloss Gelcoat  |
| One way transmission loss                | Not greater than .5 dB  |   |  |