The RFS has ten cable connectors on the bottom of the unit. Eight are antenna connections, with the connectors alternately numbered from right to left as shown in Figure 33. The two connectors in the middle are for antenna calibration and data/DC power connections. Install surge protectors on nine (9) of the RFS connectors – the eight antenna connectors and the calibration connector. The surge protectors must be installed directly to the RFS to provide protection for the antenna elements. Torque the surge protectors to 20-24 inch-pounds.

Figure 33: PolyPhaser PSX-ME Surge Protectors at the Antenna (RF and Cal Cables)

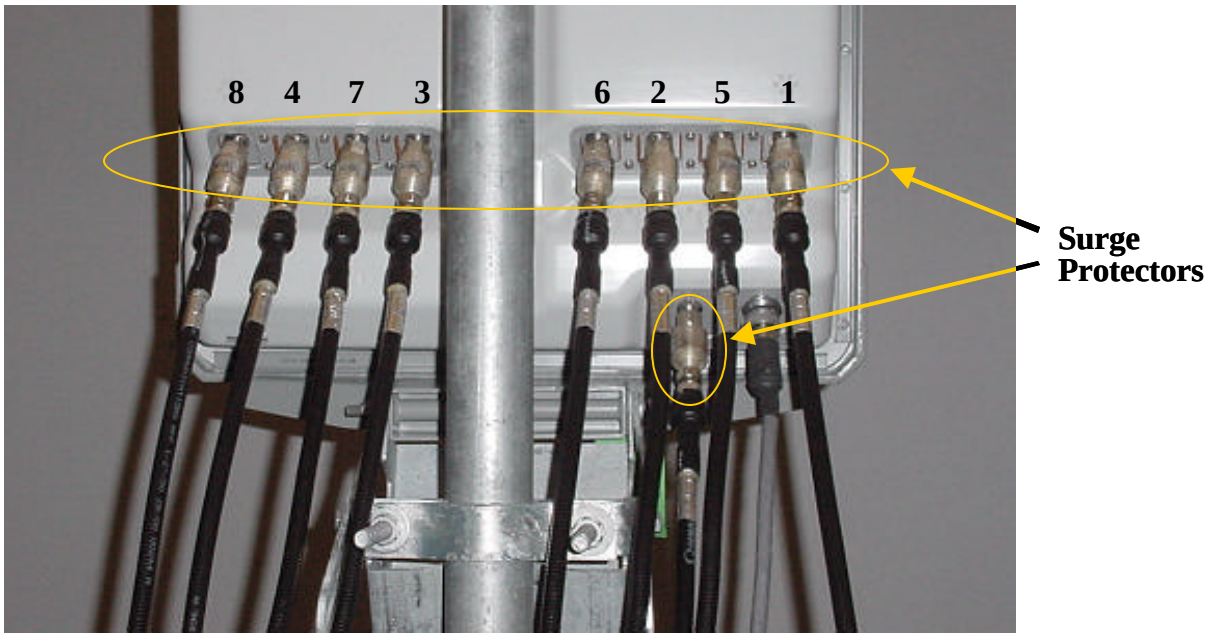
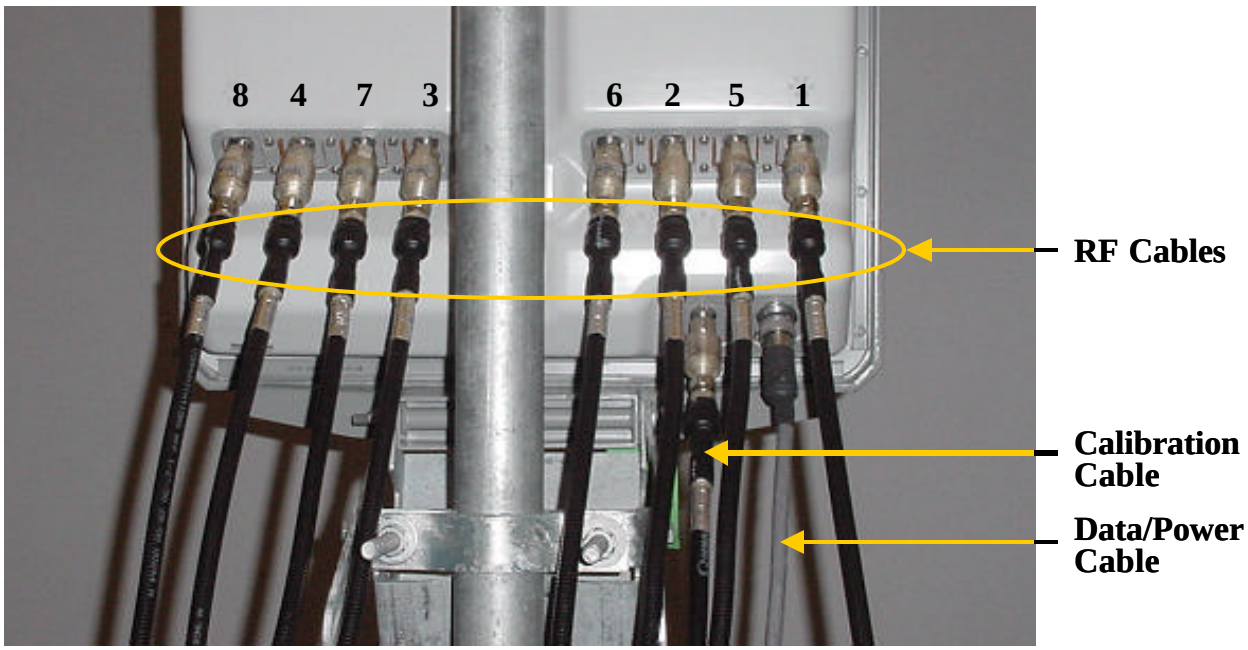


Figure 34: Surge Protectors

Install Cables Between the RFS & BTS

Connect all of the cables – the eight antenna cables, the calibration cable and the data/power cable – to the surge protectors on the RFS. For ease of installation, install the cables from the inside out. Ensure that the proper cable is connected to the proper antenna (Figure 35). Torque the RF cable connectors to 20-24 inch-pounds.

Figure 35: Completed Cable Installation at the Antenna



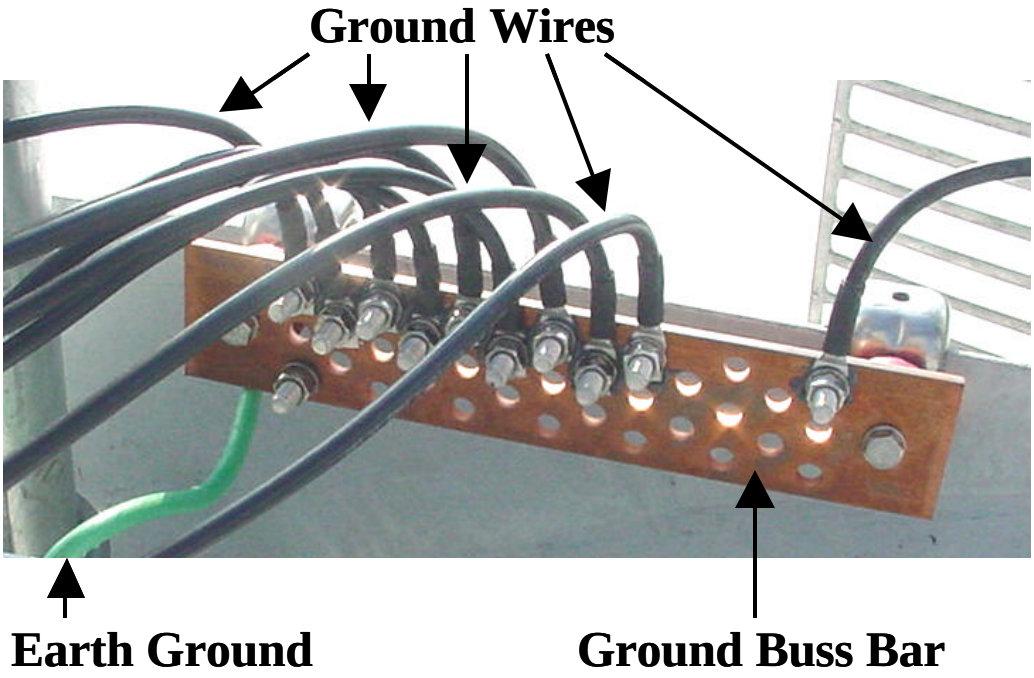
Install Grounding Kit on Cables

Install grounding kit wire connections on the eight (8) RFS cables and the one (1) CAL cable per the instruction sheet that comes with the grounding kit. Install the grounding wire in a position on the cable so that it can be attached to the ground buss bar that is mounted close to the RFS. More than one ground buss bar may be installed in the system, depending on the length of the cable run. Reference the Regulatory Information in Chapter 1, Page 8.

Connect Ground Wires to the Ground Buss Bar

Connect the ground wires on the cables to the ground buss bar using the hardware supplied with the grounding kit. Connect the ground stud on the RFS to the ground buss bar. Use a ¼-inch terminal lug to connect the ground wire to the ground stud on the RFS. Connect the ground buss bar to earth ground. An example is shown in Figure 36.

Figure 36: RFS Grounding



Test the RFS & Cables

Test the RFS and the eight (8) cables using Appendix O, the RFS System Test Form. Record the results in the form. For this test, use the cable connectors that will be attached to the BTS. Include the jumpers and all surge protectors.

Weatherize the RFS Cable Connectors

Weatherize all ground wire connections exposed to weather using electrical tape and butyl mastic tape. Follow the instructions supplied with the weatherproofing kit. Examples are shown in Figure 37 and 38.

Figure 37: Weatherizing RFS Connectors Cables

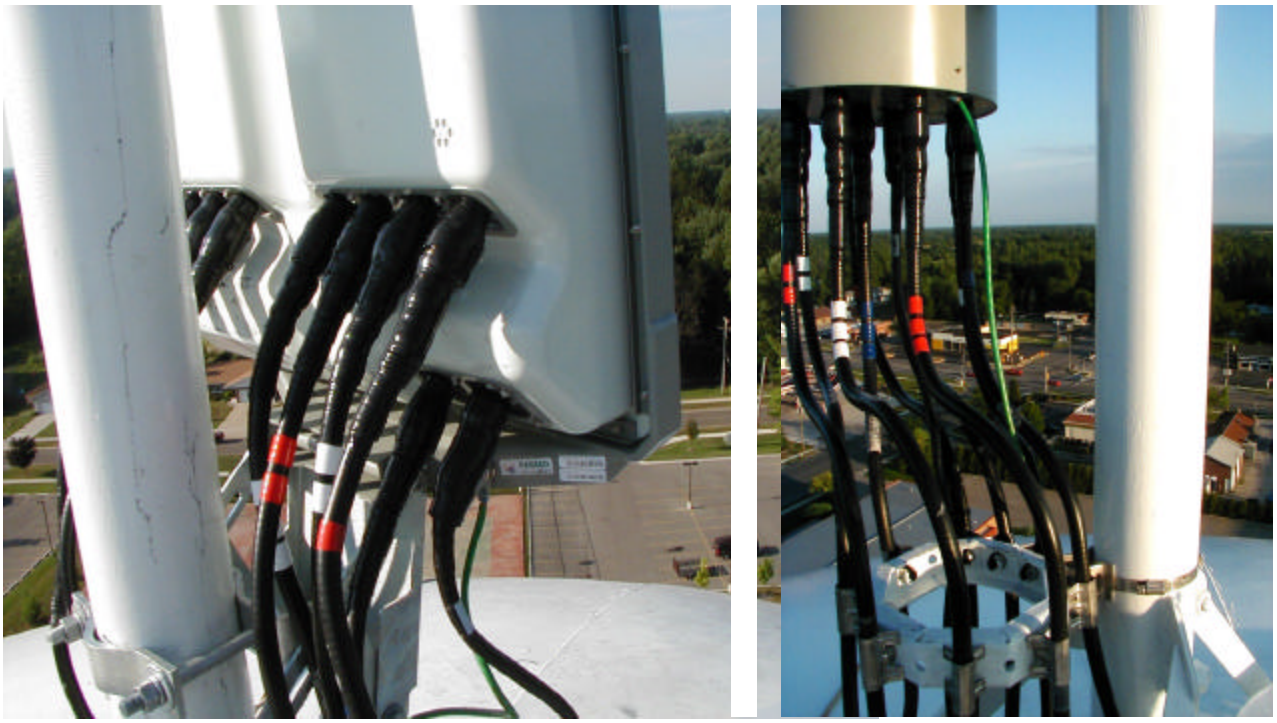


Figure 38: Weatherizing Ground Wires