

## INSTALLATION INSTRUCTIONS

EM-A20003 and EM-A20004 Series  
Multi-Band Low Profile Antenna  
746-960 / 1710-2700 MHz

*Congratulations on your selection of another quality antenna product from E/M Wave.*

*E/M Wave is committed to continually provide the greatest antenna VALUE for your wireless applications.*

1. **Parts:** Verify all parts are included with the Antenna as shown in Figure 1.
  - a. Antenna
  - b. Lock Washer
  - c. M10 Hex Nut

2. **Tools:**
  - a. 17mm or 11/16" open end wrench
  - b. 3/8 inch drill bit or hole punch



Figure 1

3. **Pre-Installation:**
  - a. The EM-A20003 antenna is designed for installation through a standard M10 or 3/8 inch hole drilled for "free fit" clearance.
  - b. **IMPORTANT:** Clearance hole is punched through the mounting plane or bulkhead surface up to a maximum of ¼ inch (6.35mm) thickness.
  - c. For best electrical performance, the metallic ground plane surface diameter should be approximately 12 inches (305mm) or greater.
  - d. Verify that the surface surrounding the mounting hole is clean and smooth to provide proper seal between the silicone compression pad and mounting surface.
4. **Installation:**
  - a. Remove hex nut and lock washer from the mounting stud.
  - b. Insert cable and stud through the mounting hole from top side surface.
  - c. From the bottom side of the mounting surface, slide lock washer and hex nut over cable and thread hex nut onto the stud. Apply firm torque to hex nut until sealing pad is completely compressed between mounting surface and antenna base.
  - d. Route cable with connector to the radio transceiver.