## Installation Instructions



Type APM Arrestor Plus® Mini Series

### **Surge Arrestors**

for 7-16 DIN and Type N Bulkhead Interfaces

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Andrew Institute offers installation training.

### **Description**

The APM Surge Arrestors are designed to protect equipment from damaging transients induced by lightning strikes. The APM Surge Arrestor is a wideband device that is available in a variety of interface combinations. The operating bandwidth is specified on each APM Surge Arrestor.

### Installation

The APM Surge Arrestor is a bidirectional RF device. Either RF port may be connected to the equipment side or the antenna side of the transmission line interface while providing equivalent protection. Do not leave the APM Surge Arrestor RF ports exposed in outdoor applications.

The APM Bulkhead Surge Arrestor grounding is accomplished through the surge arrestor body at the point of attachment to the bulkhead. The bulkhead must be attached to a master ground bar or the system's earth ground ring to ensure a low impedance path to ground.

During installation, all grounding contact surfaces must be clean, dry, and free of oxidation.

An optional Bulkhead Angle Adapter Kit is available to facilitate mounting when a grounding bulkhead is not available. Order Type 243951 for Type N and Type 243950 for Type 7-16 DIN.

# Type APM-BDFDM 7-16 DIN Bulkhead Interface Torque Value = 18-22 lb-ft (25-30 N·m)

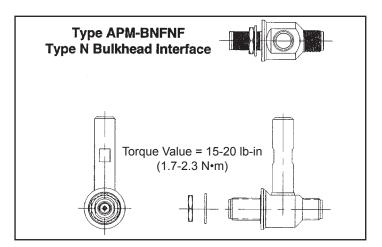
### **Microwave Performance Testing**

The APM Surge Arrestors can be readily tested for microwave performance using any network analyzer. VSWR (return loss), insertion loss are specified for the operating bandwidth only. Fault location testing can be performed through the APM Surge Arrestor with the appropriate test equipment (i.e. vector network analyzer with time domain capability). Some test equipment manufacturers refer to this type of fault location testing as Frequency Domain Reflectometry (FDR).

#### **Notice**

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. Andrew installation instructions are written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

Andrew disclaims any liability or responsibility for the results of improper or unsafe installation practices.



### **Andrew LLC**

### **Customer Service 24 hours**

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