

## **SPECIFICATION**

Part No. : FW.80.SMA.M

Product Name : **Meteor** 169MHz 0dBi Flexible Whip Monopole

**Omni-Directional Antenna** 

SMA Male connector

Feature : IP67 Housing

1/4 Wavelength

Robust but Flexible Inner Steel Whip

High Efficiency Outdoor Antenna

Advanced RF Design and Materials





#### 1. Introduction

The Meteor FW.80 is a 0dBi 169MHz ISM band 1/4 wavelength monopole flexible whip antenna with omni- directional pattern optimized in the azimuth for wide coverage range in typical 169 MHz applications such as Wireless M-Bus metering. It also finds its usage in remote asset monitoring applications, alarms, paging systems and private mobile radio services.

The Meteor has a IP67 housing. The antenna, like all low frequency monopole antennas needs to be mounted to a metal plate to radiate.

For a waterproof integration to a metal box a waterproof panel mount SMA connector or cable assembly can be provided. TNC and N-type antenna versions are also available.

This whip is made up of a flexible inner steel core covered by TPU so extremely resistant to collisions and maintaining its original shape and RF performance.

Customized frequency and gain versions can be supplied.



# 2. Specification Table

Meteor FW.80	
Frequency (MHz)	169
Peak Gain (dBi) *	0dBi
Average Gain (dBi) *	-3.9
Efficiency (%) *	40%
Impedance $(\Omega)$	50
Polarization	Linear
Radiation Pattern	Omnidirectional
Input Power(W)	50
MECHANICAL	
Dimensions (mm)	353xφ16
Base Diameter (mm)	φ16
Whip Diameter (mm)	φ4
Casing	ABS
Connector	SMA(M)
ENVIRONMENTAL	
Temperature Range	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

<sup>\*</sup> For low frequency antennas these parameters can only be estimated using RF formula calculation, simulation or rough field test comparisons with large benchmark antennas.

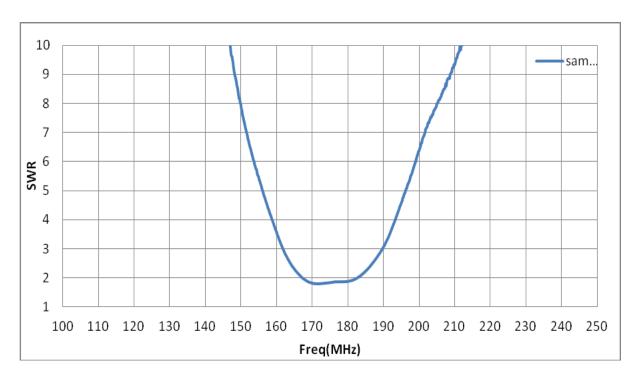


### 3. Antenna Characteristics

#### 3.1 Antenna setup

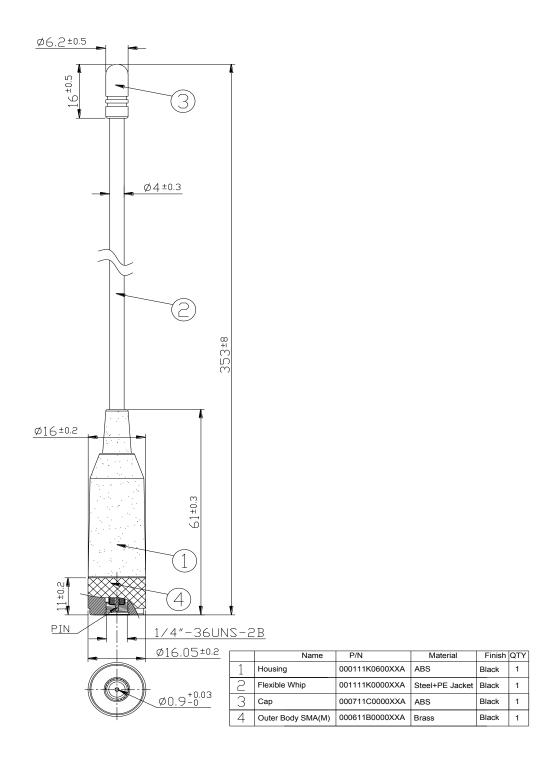
Antenna is placed on metal ground 30x30cm

### 3.2 SWR (on metal ground plane 30x30cm)



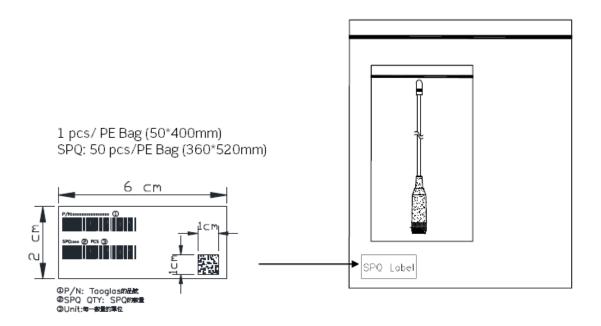


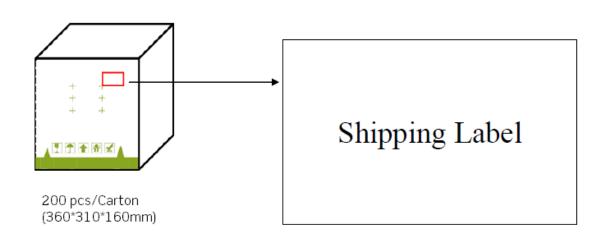
## 4. Drawing





## 5. Packaging







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