

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 (Ω)	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

^{*} For low frequency antennas these parameters can only be estimated using RF formula calculation, simulation or rough field test comparisons with large benchmark antennas.

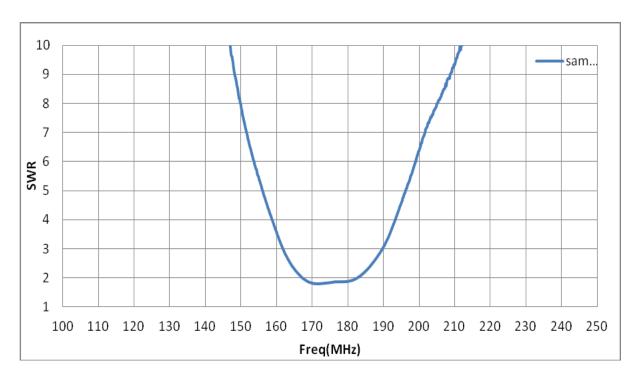


3. Antenna Characteristics

3.1 Antenna setup

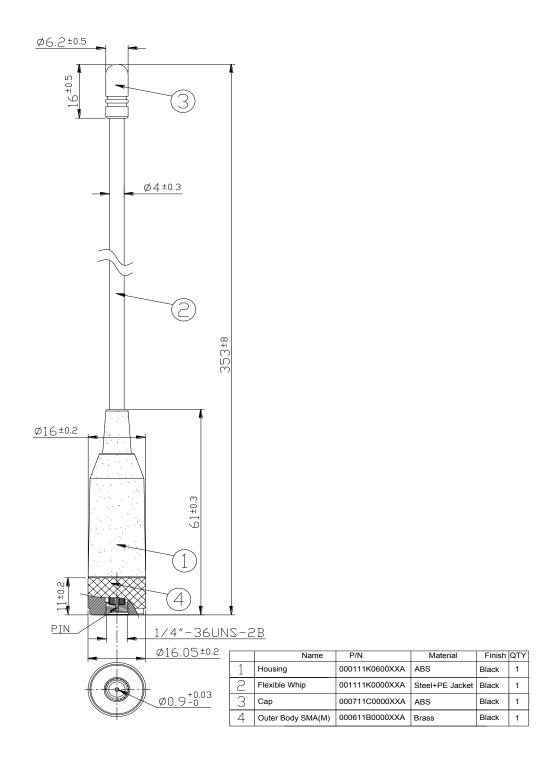
Antenna is placed on metal ground 30x30cm

3.2 SWR (on metal ground plane 30x30cm)



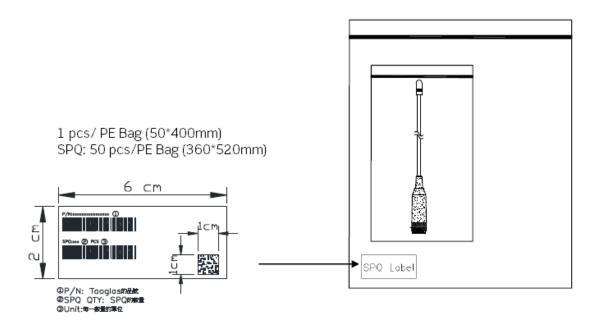


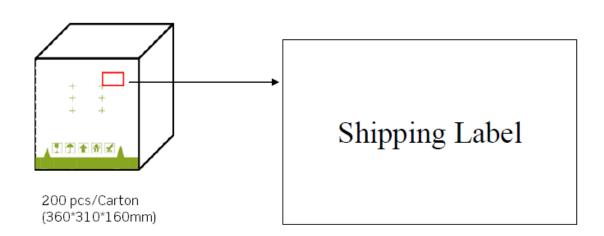
4. Drawing





5. Packaging







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