



TAOGLAS®



Datasheet

Meteor

Part No:
FW.81.SMA.M

Description:

Meteor 135MHz 0dBi Flexible Whip Monopole Omnidirectional Antenna
SMA Male connector

Features:

IP65 Housing
1/4 Wavelength
Robust but Flexible Inner Steel Whip
High Efficiency Outdoor Antenna
Advanced RF Design and Materials
RoHS Compliant

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1. Introduction



The Meteor FW.81 is a 0dBi 135MHz ISM band 1/4 wavelength monopole flexible whip antenna with omnidirectional pattern optimized in the azimuth for wide coverage range in typical 135MHz applications such as Wireless M-Bus metering. It is also used in remote asset monitoring applications, alarms, paging systems and private mobile radio services.

The Meteor has an IP65 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. Specifications

Meteor FW.81	
Frequency (MHz)	135
Peak Gain (dBi) *	0dBi
Average Gain (dBi) *	-3.9
Efficiency (%) *	40%
Impedance (Ω)	50
Polarization	Linear
Radiation Pattern	Omnidirectional
Input Power(W)	50
Tested Power(W)	10
Mechanical	
Dimensions (mm)	353x ϕ 16
Base Diameter (mm)	ϕ 16
Whip Diameter (mm)	ϕ 4
Casing	ABS
Connector	SMA(M)
Environmental	
Temperature Range	-40°C to 85°C
Humidity	Non-condensing 65°C 95% RH

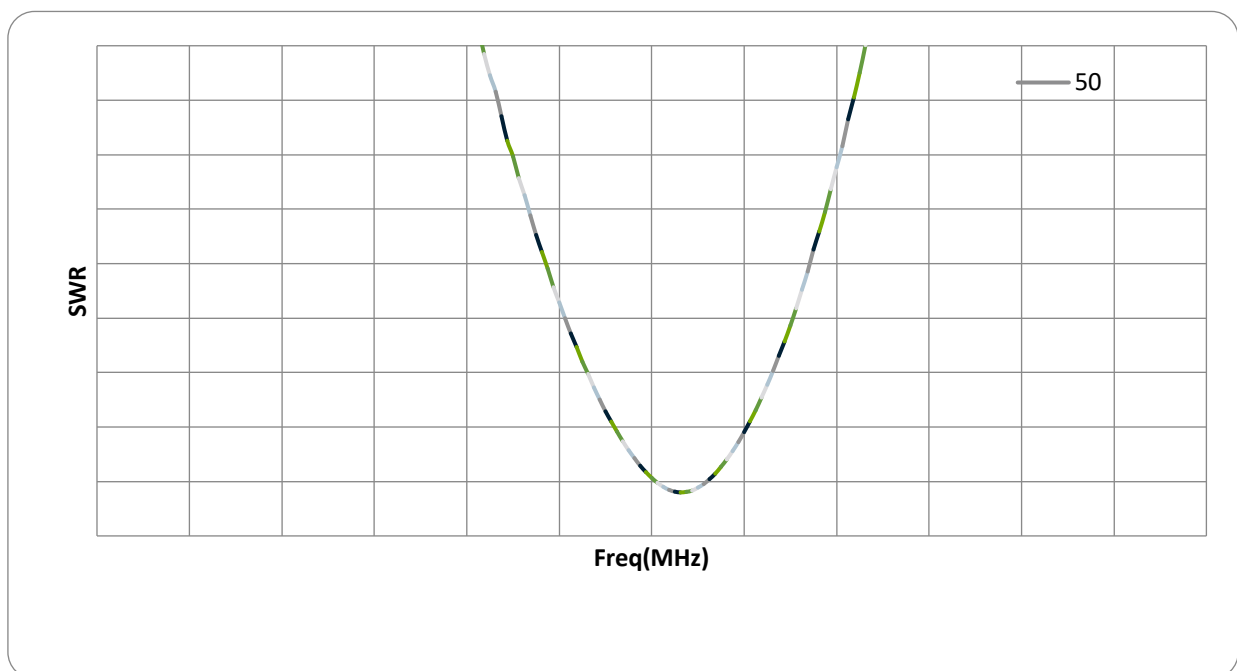
* For low frequency antennas these parameters can only be estimated using RF formula calculation, simulation or rough field test comparisons with large benchmark antennas.

3. Antenna Characteristics

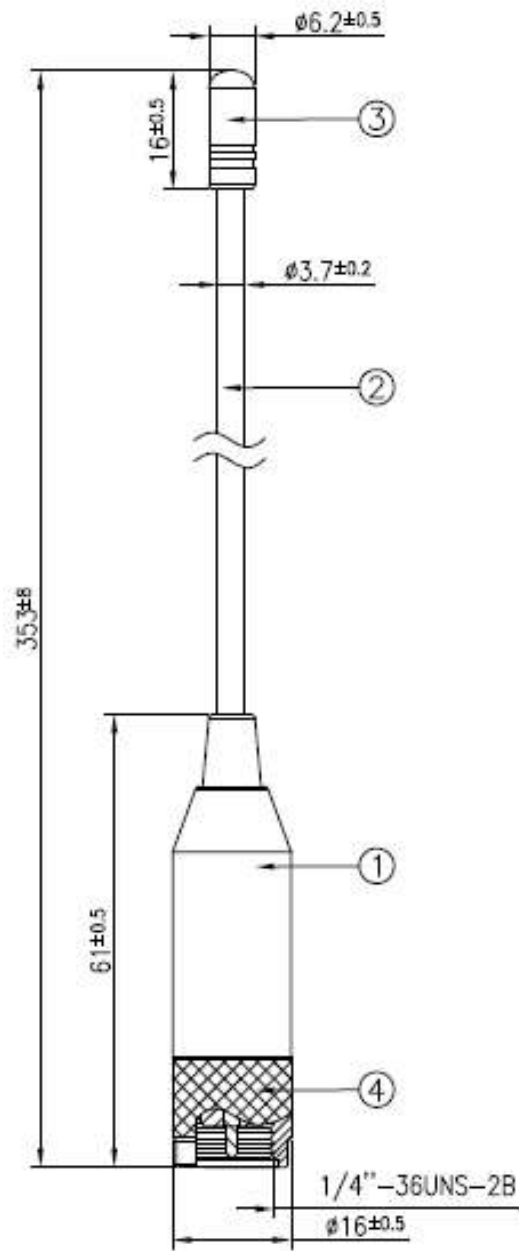
3.1 Antenna Setup

Antenna is placed on metal ground 30x30cm

3.2 SWR (on metal ground plane 30x30cm)

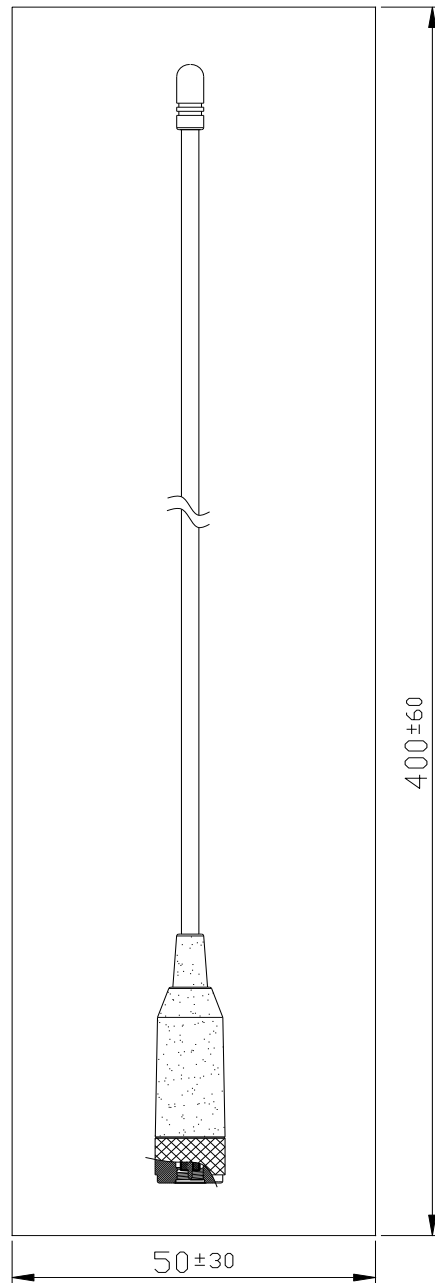


4. Mechanical Drawing (Units: mm)



	Name	P/N	Material	Finish	QTY
1	Housing	000113A000002A	ABS	Black	1
2	Flexible Whip	000113A000002A	Steel+PE Jacket	Black	1
3	Cap	000713A000002A	POM	Black	1
4	Outer Body SMA(M)	000613A000002A	Brass	Black	1

5. Packaging



1PCS/BAG

Changelog for the datasheet

SPE-12-8-034 - FW.81.SMA.M

Revision: E	
Date:	2019-08-16
Changes:	Updated to new format
Changes Made by:	Dan Cantwell

Previous Revisions

Revision: D (Current Version)	
Date:	2017-04-08
Changes:	Updated as per PCN PCN-17-8-088
Changes Made by:	Andy Mahoney

Revision: C	
Date:	2012-15-10
Changes:	
Changes Made by:	SS

Revision: B	
Date:	2012-26-07
Changes:	
Changes Made by:	SS

Revision: A (Original First Release)	
Date:	2012-02-04
Notes:	
Author:	SS



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