



TAOGLAS®



Datasheet

MA2220 2-in-1 AM/FM & DAB Adhesive Antenna

Part No:
MA2220.A.TT.002

Description:

MA2220 – 2-in-1 Active AM/FM & DAB Metalized Film Adhesive Antenna

Features:

2-in-1 Adhesive Mount Antenna

Dimensions: 550 x 60 x 7.2mm

1* Active DAB Antenna: FAKRA Code A Black

1* Active AM/FM Antenna: FAKRA Code B White

IP41 Rated Waterproof

Manufactured in TS16949 Automotive Approved Facilities

RoHS & Reach Compliant

1.	Introduction	3
2.	Specifications	4
3.	Antenna Characteristics	5
4.	Mechanical Drawing	6
5.	Packaging	7
6.	Installation Guidelines	8
	Changelog	9

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

© Taoglas



1. Introduction



The MA2220.A.TT.002 is a next-generation 2-in-1 Active AM/FM and DAB antenna. It comprises of a robust ABS+PC housing and a thin metalized PET film. The antenna is approved for use on heavy-duty equipment and meets the strictest OEM heavy-duty truck standards. It supports AM/FM, and DAB band III.

The antenna is first tier TS16949 heavy-duty truck approved and is an ideal choice for:

- OEM automotive
- Trucks
- Other vehicles and heavy equipment.

The antenna is powered from the radio through the DAB connection. The antenna comes with 300mm low-loss RG-174 coaxial cables as standard, terminating in FAKRA SMB code B for AM/FM and FAKRA SMB code A for DAB III. In addition, a long, metalized film is utilized to increase receive signal sensitivity leading to stronger AM/FM and DAB reception. The antenna is manufactured in TS16949 automotive approved facilities.

The cable and connectors are fully customizable, contact your regional Taoglas customer support team for more information.

2. Specifications

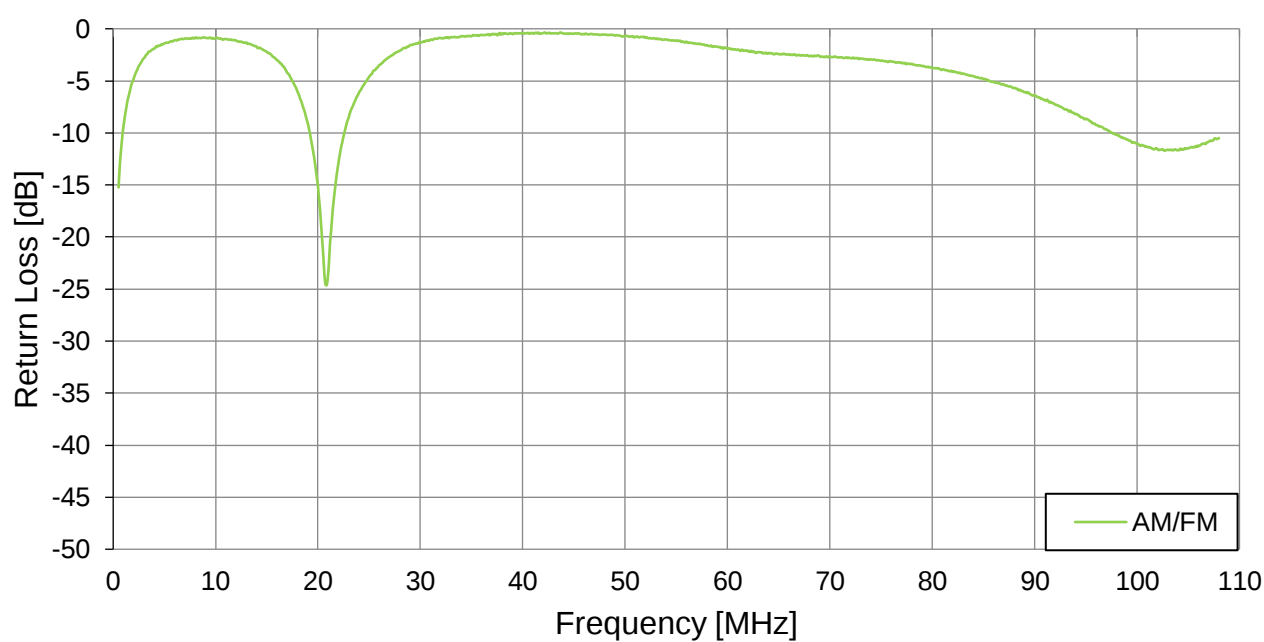
AM Antenna	
AM Radio Bands	535~1605 kHz
Gain	2 dB (typ)
FM Antenna	
Frequency (MHz)	88~108MHz
Gain	10 dB (typ)
DAB Antenna	
Frequency (MHz)	174-240 MHz
Gain	12 dB (typ)
Power	
Voltage	5-13V
Current	50mA @ 12V

Mechanical	
Dimensions	550*60*7.2 mm
Cable	300mm of RG-174
Connector	DAB: FAKRA Code A AM/FM: FAKRA Code B
Housing Material	PC
Film Material	PET
Adhesive	3M9472LE on flex 3M VHB 5952 on Housing
Weight	57.1g
Cable Pull Force	35.59N
Environmental	
Waterproof	IP41
Temperature Range	-40°C to 85°C
Thermal Shock	IEC 60068-2-14
Humidity	Non-condensing 65°C 95% RH

3. Antenna Characteristics

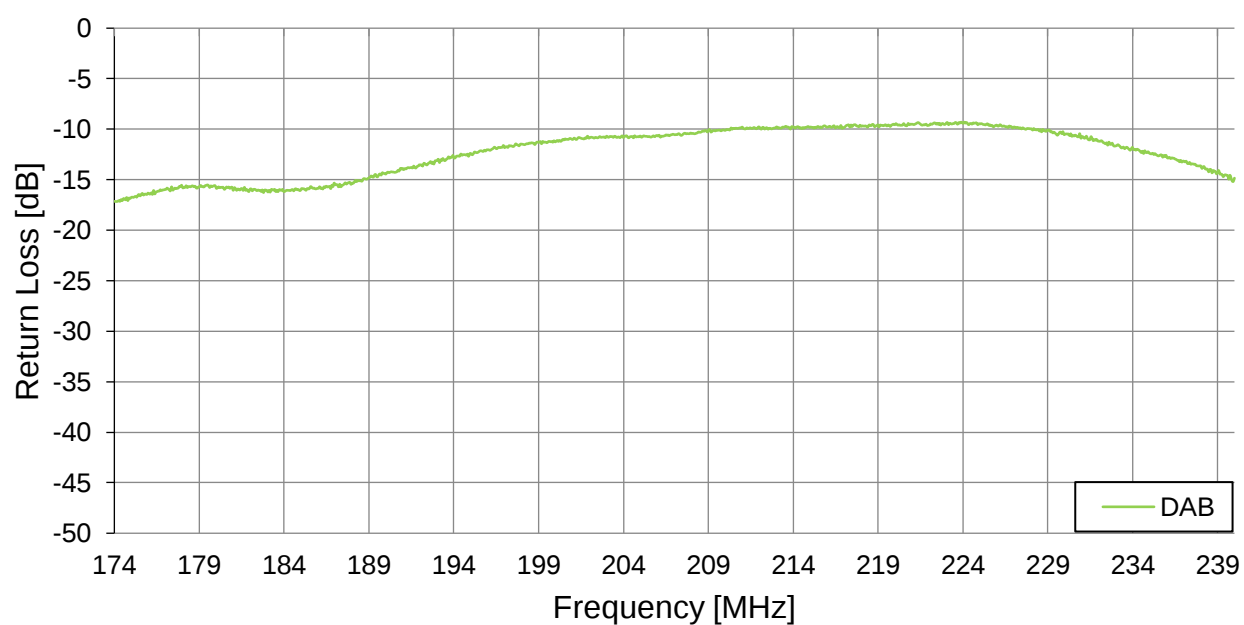
3.1 AM/FM

Return Loss

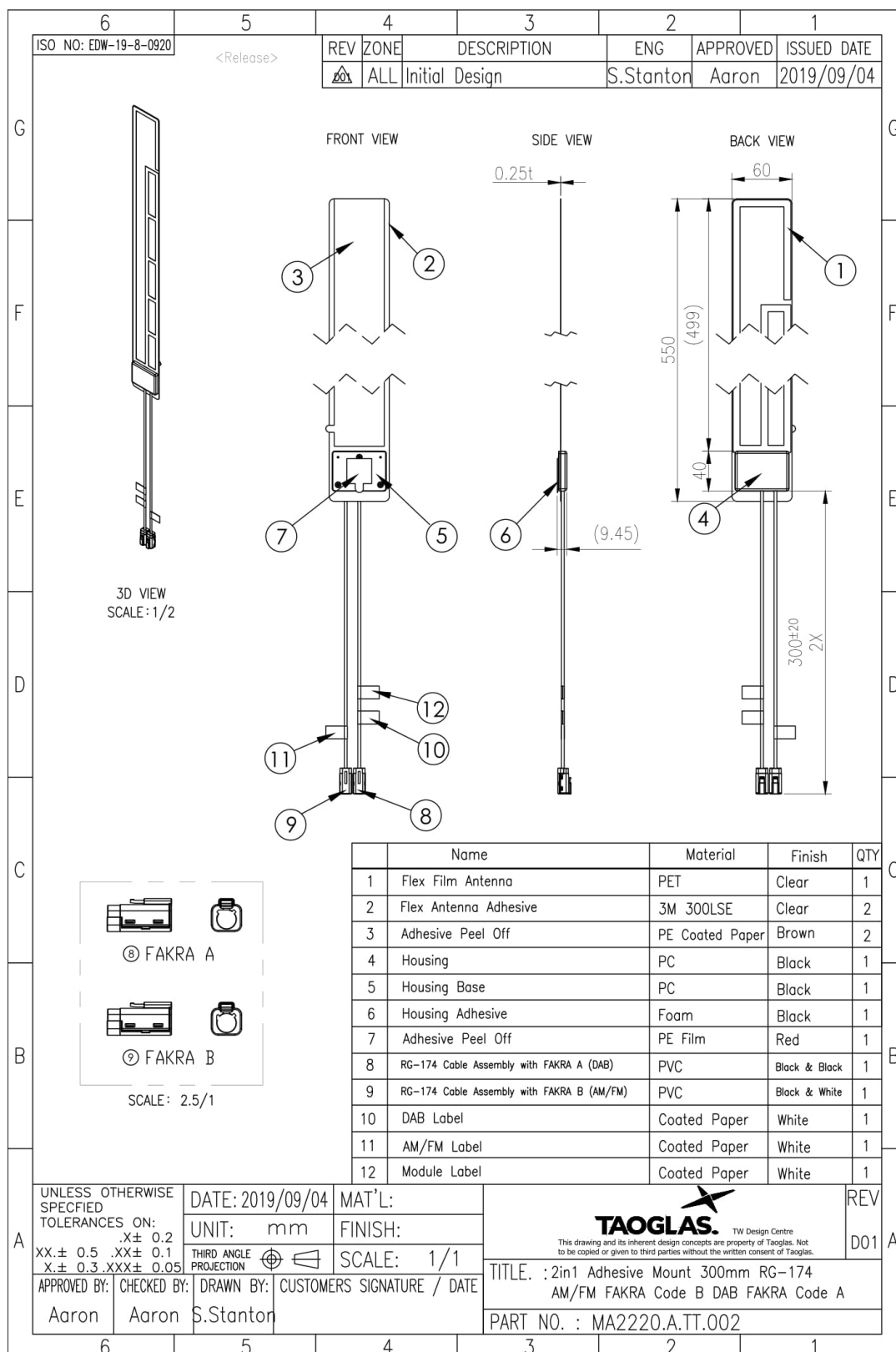


3.2 DAB Antenna

Return Loss



4. Mechanical Drawing (Units: mm)

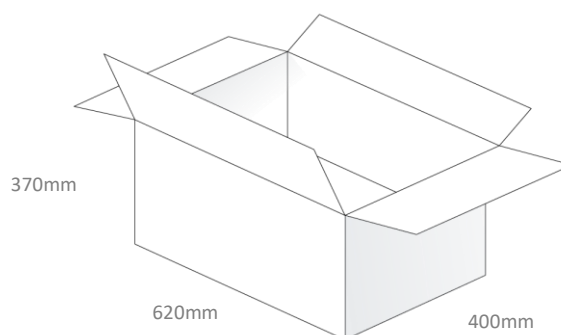


5. Packaging

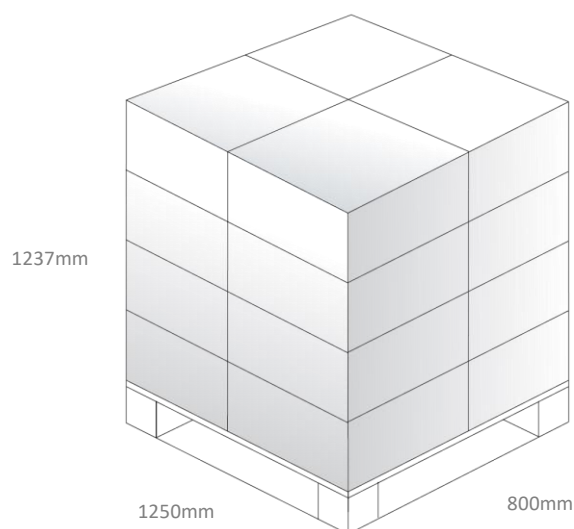
1pc MA2220.A.TT.002 per Poly Bag
Weight: 57.1g



200pcs MA2220.A.TT.002 per Carton
Dimensions: 620*400*370mm
Weight: 11Kg



Pallet Dimensions:
1250*800*1237mm
12 Cartons Per Pallet
4 Cartons Per Layer, 3 Layers



6. Installation Guidelines

Installation Instructions

MA2220 Series

2-in-1 Adhesive Mount Combination Antenna



A Introduction

The Taoglas MA2220 is a combination antenna designed for mounting inside the headliner of a vehicle. The MA2220 can accommodate combinations of up to 2 antennas in one sleek housing. No hole is required when installing this antenna, meaning no damage will be done to the vehicle.



Electrical Safety

The MA2220 contains an active AM/FM/DAB antenna.

Rated voltage: 10-16VDC Rated current: 50mA typ

The supply to this device must be provided with over-current protection of 1A maximum.

Power consumption@10V (mA) 50 mA



B Mounting & Location

The MA2220 is designed to be mounted inside the headliner of a vehicle but can also be mounted in other areas of the vehicle, such as the dashboard, the cab and even the windscreen due to the flexibility of the metalized PET film liner.



C Installation of the Antenna

The antenna comes with 3M adhesive already attached. To install the antenna, clean the surface that the antenna will be adhered to. Remove the liner from the adhesive tape from the base of the antenna and then firmly press the film onto the mounting surface, taking care to avoid any trapped air.



Mounting

Please take care when mounting to ensure the antenna is at least 50mm above metal and at least 25mm away (edge to edge) from metal structures

D Routing and Connection of the Cables

The Cables supplied are RG-174 for both feeds. The cables are denoted by labels for ease of installation. Connect each individual connector to the correct port on your device. If any cable is unused, please fit a 50Ω terminator to the individual connection.

E Notices



Caution

To comply with FCC RF Exposure requirements in section 1.1310 of the FCC Rules, antennas used with this device must be installed to provide a separation distance of at least 20 cm from all persons to satisfy RF exposure compliance.



Warning

Do not Operate the transmitter when someone is within 20 cm of the antenna.

Do not operate the equipment in an explosive atmosphere



European Waste Electronic Equipment Directive 2002/96/EC

Please ensure that your old Waste Electricals and Electronics are recycled do not throw them away into standard waste.

Waiver: This document represents information compiled by Taoglas to the best of our current knowledge. This is not intended to be used as a representation or warranty of fitness of the products described for any particular purpose. This document details guidelines for general information purposes only. When planning installations, always seek specialist advice and ensure that the products are always installed by a properly qualified installer in accordance with applicable regional laws and regulations.



MA2220/IG-20-8-006

www.taoglas.com

Changelog for the datasheet

SPE-19-8-114 – MA2220.A.TT.002

Revision: B (Current Version)

Date:	2020-07-16
Changes:	Updated Images and intro
Changes Made by:	Jack Conroy

Previous Revisions

Revision: A (Original First Release)

Date:	2019-08-26
Notes:	Initial Datasheet Release
Author:	Yu Kai Yeung



www.taoglas.com

