



TAOGLAS®



Datasheet

Profila Series

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 x Active DAB Antenna: FAKRA Code A Black

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

IP41 Rated Waterproof

2-in-1 Adhesive Mount Antenna

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
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	Changelog	9

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1. Introduction



The Taoglas Profila Series MA2220.A.TT.002 is a next-generation 2-in-1 Active AM/FM and DAB antenna. It comprises of a low profile, robust ABS+PC housing and an ultra-thin metalized PET film antenna. 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.

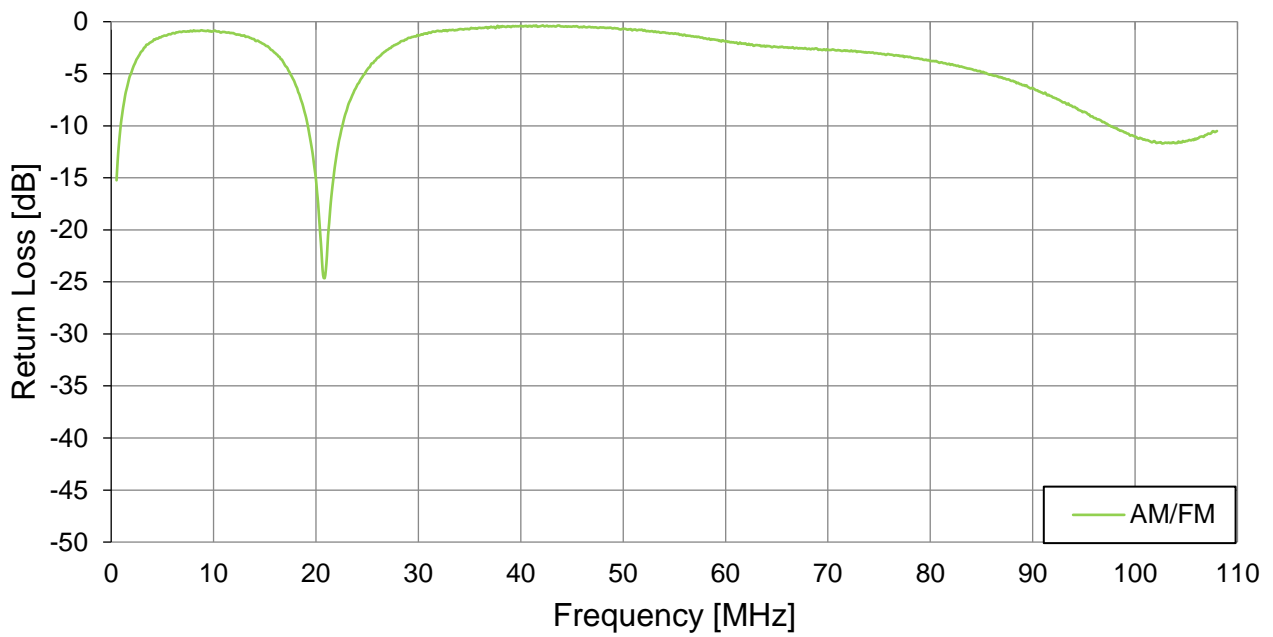
2. Specifications

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

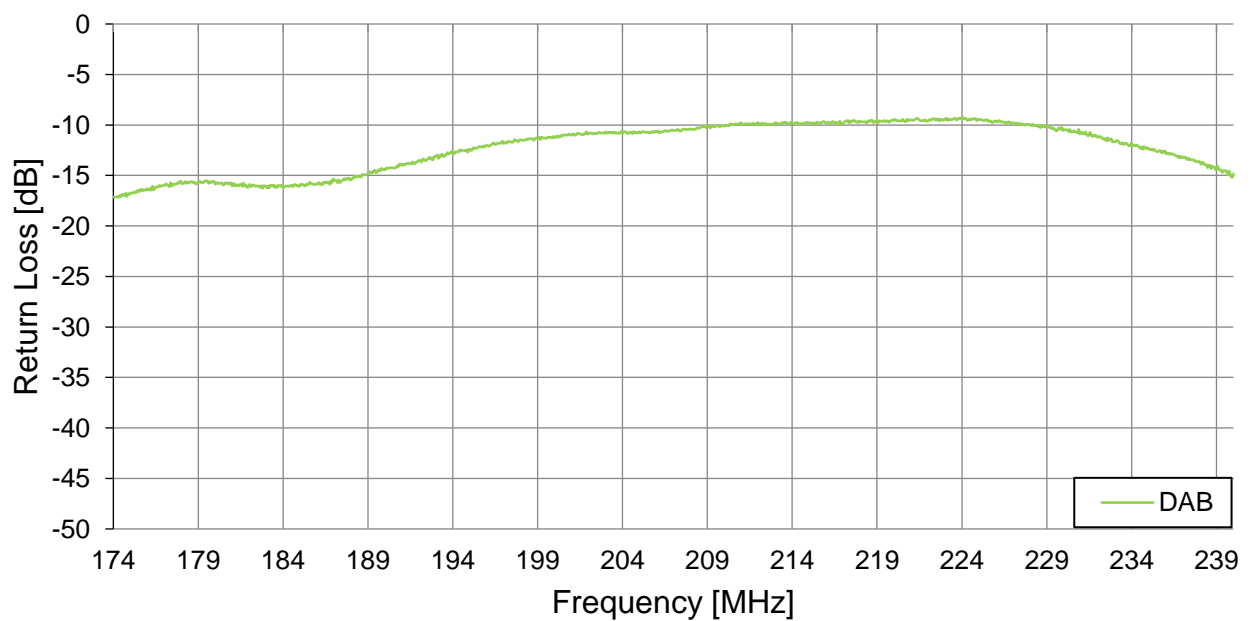
3.1 AM/FM

Return Loss




3.2 DAB Antenna

Return Loss



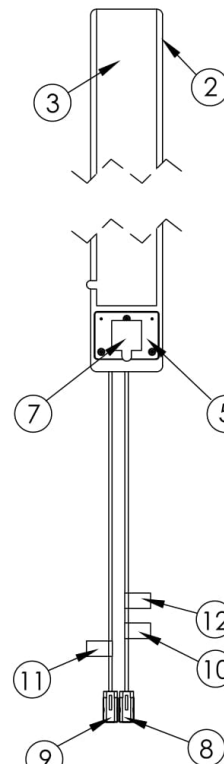
4. Mechanical Drawing (Units: mm)

6	5	4	3	2	1	
ISO NO: EDW-19-8-0920	<Release>	REV ZONE	DESCRIPTION	ENG	APPROVED	ISSUED DATE
		ALL	Initial Design	S.Stanton	Aaron	2019/09/04

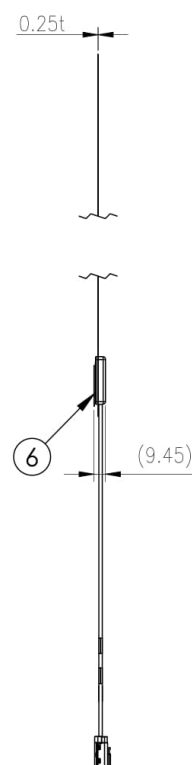


3D VIEW
SCALE: 1/2

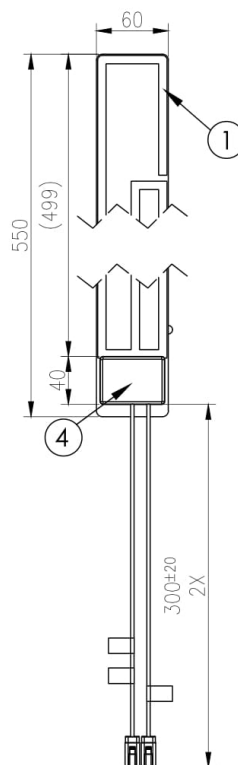
FRONT VIEW



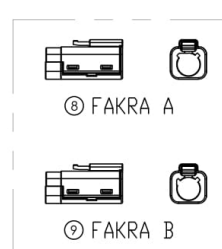
SIDE VIEW



BACK VIEW



Name	Material	Finish	QTY
1 Flex Film Antenna	PET	Clear	1
2 Flex Antenna Adhesive	3M 300LSE	Clear	2
3 Adhesive Peel Off	PE Coated Paper	Brown	2
4 Housing	PC	Black	1
5 Housing Base	PC	Black	1
6 Housing Adhesive	Foam	Black	1
7 Adhesive Peel Off	PE Film	Red	1
8 RG-174 Cable Assembly with FAKRA A (DAB)	PVC	Black & Black	1
9 RG-174 Cable Assembly with FAKRA B (AM/FM)	PVC	Black & White	1
10 DAB Label	Coated Paper	White	1
11 AM/FM Label	Coated Paper	White	1
12 Module Label	Coated Paper	White	1



⊗ FAKRA A

⊙ FAKRA B

SCALE: 2.5/1

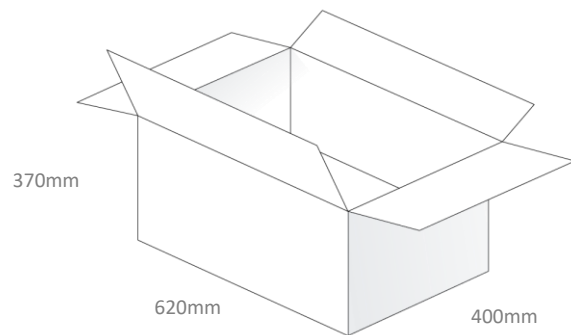
UNLESS OTHERWISE SPECIFIED TOLERANCES ON:	DATE: 2019/09/04	MAT'L:	TW Design Centre <small>This drawing and its inherent design concepts are property of Taoglas. Not to be copied or given to third parties without the written consent of Taoglas.</small>	REV
.X ± 0.2	UNIT: mm	FINISH:		D01
XX ± 0.5 .XX ± 0.1	THIRD ANGLE PROJECTION	SCALE: 1/1		A
X ± 0.3 .XXX ± 0.05	APPROVED BY: Aaron	CHECKED BY: Aaron	DRAWN BY: S.Stanton	TITLE: :2in1 Adhesive Mount 300mm RG-174 AM/FM FAKRA Code B DAB FAKRA Code A
			CUSTOMERS SIGNATURE / DATE	PART NO. : MA2220.A.TT.002

5. Packaging

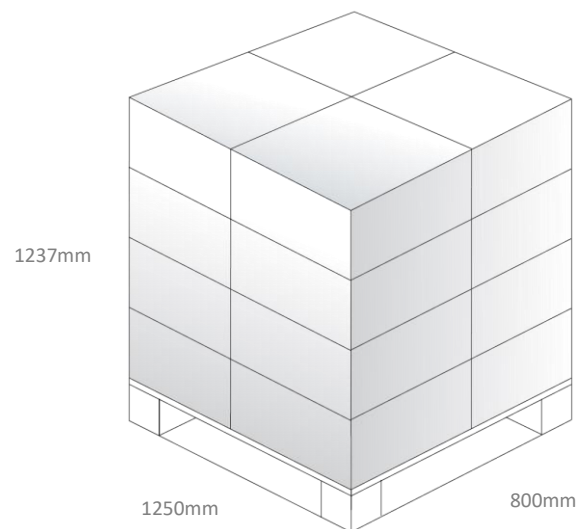
1pc MA2220.A.TT.002 per Poly Bag
Weight: 57.1g



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.



Changelog for the datasheet

SPE-19-8-114 – MA2220.A.TT.002

Revision: C (Current Version)

Date:	2020-12-04
Changes:	Renamed to Profila Series
Changes Made by:	Jack Conroy

Previous Revisions

Revision: B

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

Revision: A (Original First Release)

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



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