### AECS1806D07Z

Request Samples 🕥

Check Inventory

181.7 x 69.1 x 68.9 mm RoHS/RoHS II Compliant MSL Level = 1

#### Features

- 4 Cabled Combo Antenna
  - MIMO 2xLTE
  - 1x Active GNSS/GPS/GLONASS/BeiDou/QZSS
  - o 1x AM/FM
- Manufactured in Automotive Certified lines
  - o IATF 16949 certified
  - o ISO 9001 certified
- Level-3 PPAP available on request
- IP67 rated
- Easy installation using Screw
- Customizable cable & connector options for RF connection

### Applications

- IoT
- M2M
- Telematics
- Transportation
- Smart Agriculture
- Geolocation and tracking

#### **Product Image**





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LMR-100

181.7 x 69.1 x 68.9 mm RoHS/RoHS II Compliant MSL Level = 1

Part Number Builder

		<u>AEC</u>	2 <u>S1806D07Z</u>	<u>/</u> <u></u>				
			↓		Cal	V	ator Tura	
Co	Color / UV Coating		Cable length in 'mm'		Cable	Cable Type & Connector Type Cable Connector Type		
Code	Description	Code	Description	Code	Туре	LTE MIMO	GNSS	AMFM
S (Standard)	Black without UV coating	3000 (Standard)	3000 mm	S (Standard)	- , po	SMA (M)	SMA (M)	FME (M)
A	Black with UV Coating		her Examples :	A		SMA (M)	SMA (M)	SMA (M)
B	White without UV Coating	0200	200 mm	B	-	SMA (M)	SMA (M)	DIN (M)
С	White with UV Coating	2000	2000 mm	C		SMA (M)	FAKRA C (F)	SMA(M)
				D		SMA (M)	FAKRA C (F)	FME (M)
				E	RG-174	SMA (M)	FAKRA C (F)	DIN (M)
				F		FAKRA D (F)	SMA (M)	SMA(M)

	~ ~ ~	
Example	<b>Configurations</b> :	

Part Number	UV Protection Coating / Color	Cable length	Cable Type / Connector Type
AECS1806D07ZS- <u>3000</u> S	Yes / Black	3000 mm	4xRG-174 with 2xSMA (M) for LTE MIMO + 1xGNSS + 1xFME (M) for AM/FM (Standard)
AECS1806D07ZA- <u>1000</u> A	Yes / Black	1000 mm	4xRG-174 with 2xSMA (M) for LTE MIMO + 1xSMA (M) for GNSS + 1xSMA (M) for AM/FM
AECS1806D07ZB- <u>5000</u> X	No / White	5000 mm	4xLMR-100 with 2xFAKRA D (F) for LTE MIMO + 1xFAKRA C (F) for GNSS + 1xDIN (M) for AM/FM

### Note :

- For the standard part number (AECS1806D07ZS-<u>3000S</u>), please refer to the packaging at the end of the document.
- For additional configuration (AECS1806D07Z $\Box$ - $\Box\Box\Box\Box$ ), MOQs, pricing and packaging changes may be applicable.



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FAKRA D (F)

SMA (M)

SMA (M)

SMA (M)

SMA (M)

SMA (M)

SMA (M)

FAKRA D (F)

SMA (M)

SMA (M)

FAKRA C (F)

FAKRA C (F)

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SMA (M)

FME (M)

DIN (M)

SMA (M)

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SMA(M)

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DIN (M)

SMA (M)

FME (M)

DIN (M)

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### **Electrical Specification**

Parameter			Specification	Unit	
		Min	Min Typ Max		
			GNSS Anten	na	
Operating	Frequency	1561		1602	MHz
Gain (2				2.0	dBiC
VSV	WR			1.5	
Impeo	lance		50		Ω
Polariz			RHCP		
			LNA		
Noise	Figure			2.0	dB
Ga		26	28	30	dB
VSV	WR			2.0	
Supply	Voltage	3.0		5.0	V
Current Co	nsumption	5.0		15.0	mA
			LTE Antenna (N	lain)	
Operating	Fraguanau	698			MHz
		1710		2690	IVIT IZ
VSV				3.0	
Gain (Z	Zenith)			3.5	dBi
Impedance			50		Ω
Polari	zation	Linear			
			LTE Antenna (A		
Operating	Frequency	698		960	MHz
		1710		2690	
VSV				3.0	
Gain (Zenith)				3.0	dBi
Impeo			50		Ω
Polari	zation		Linear		
			FM/AM Anter		
Operating Frequency			0.529 1.629		MHz
		76		108	
VSV		12	16	2.5	
Peak Gain	FM AM	13	<u>16</u> 5	<u>19</u> 8	dB
Impe		<u>∠</u>	50	0	Ω
Impedance Polarization		Linear			22
Supply Voltage (DC)		9	Linca	16	V



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### **Mechanical Specification**

Parameter	Specification
Antenna Dimension	181.7 x 69.1 x 68.9 mm
Mounting Type	Screw
RF Connector	3x SMA (M) + 1x FME (M)
RF Cable	4x RG174
Cable Length	3 m
Material	PC + ABS

### **Environmental Specification**

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	Up to 95%
RoHS Compliance	Yes
PB Free	Yes
MSL	1
ESD Sensitive	Yes
Vibration	$10 \sim 1000 \text{ Hz G} = 28.7 \text{m/s}^2$
Ingress Protection	IP67 (excluding cable outlet)



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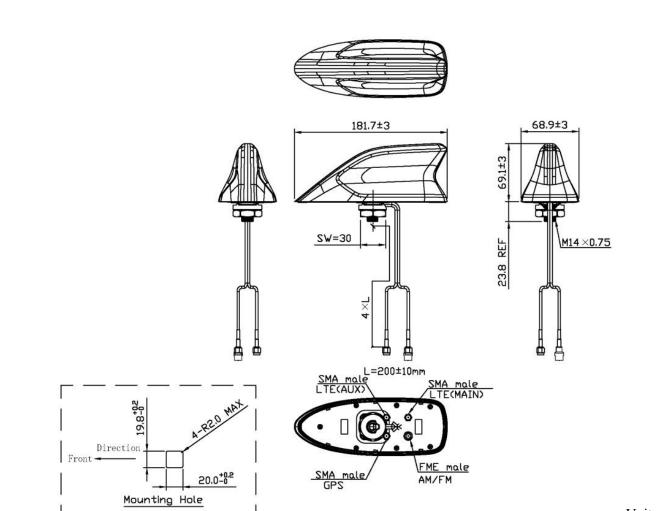
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#### **Product Dimension**



Unit : mm



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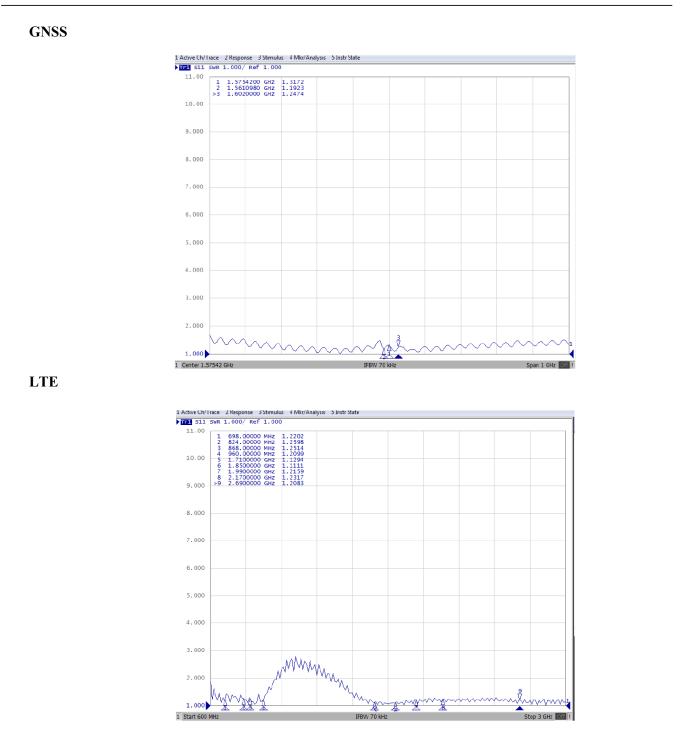
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#### Test Measurement - VSWR

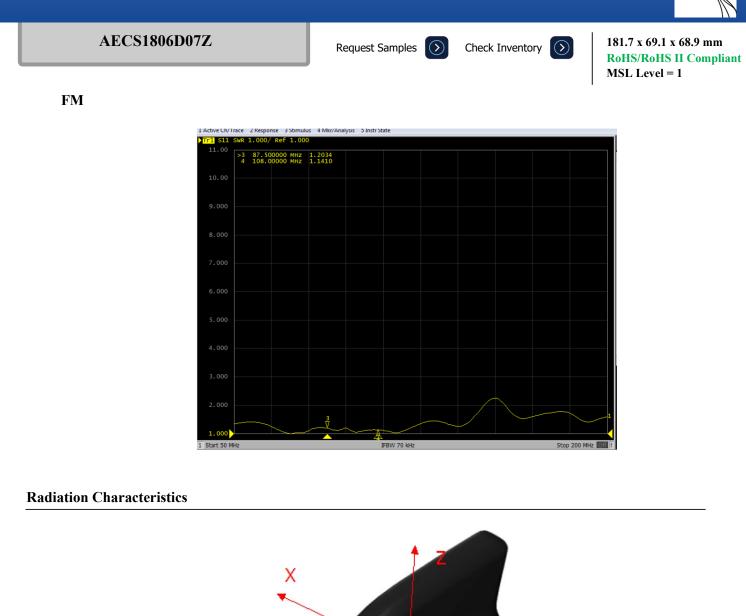


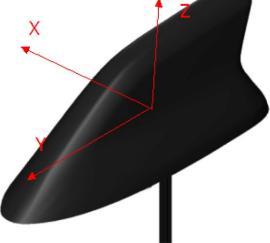


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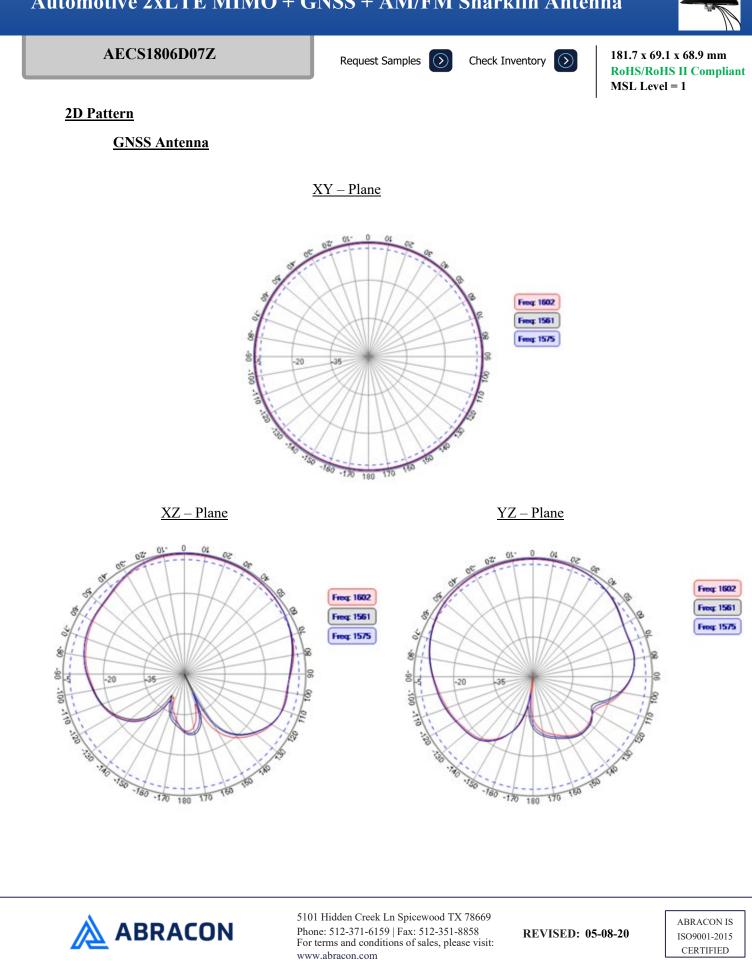


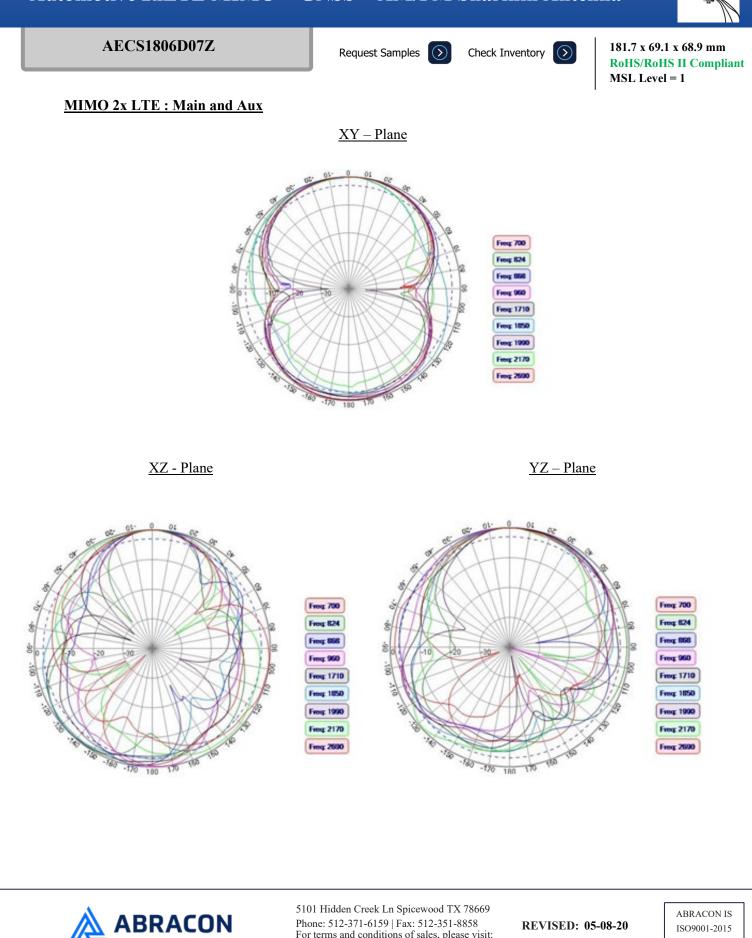




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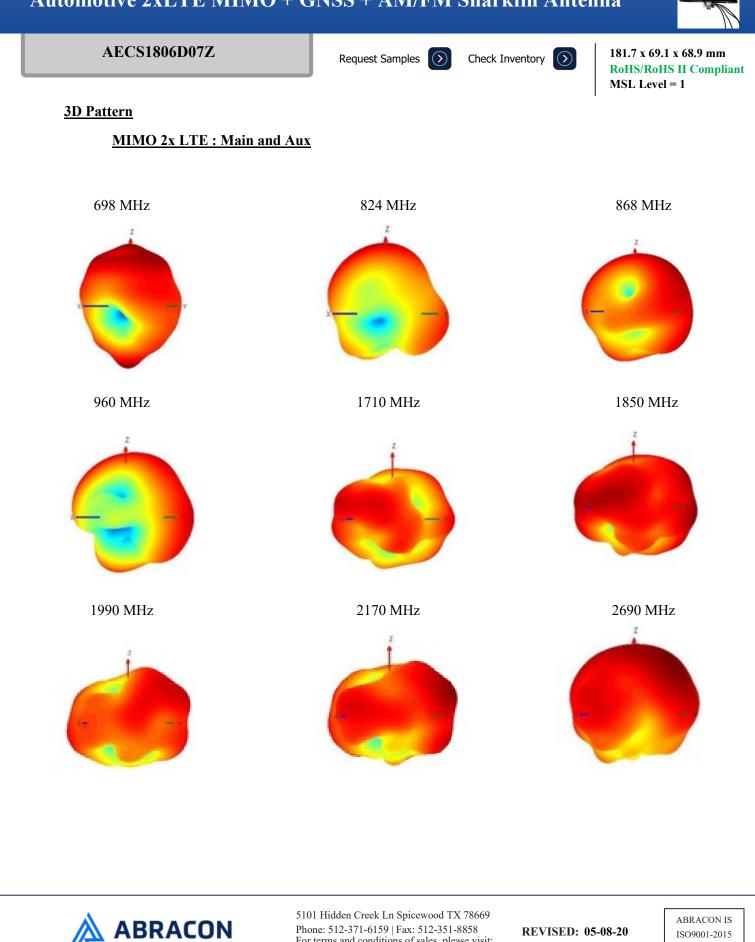




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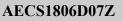
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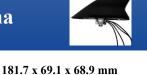
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**RoHS/RoHS II Compliant** 

MSL Level = 1

#### **Gain and Efficiency**

Frequency (MHz)	Gain (dBi)	Efficiency
698	3.47	0.68
824	2.29	0.59
868	1.92	0.57
960	2.2	0.56
1710	1.23	0.57
1850	0.65	0.54
1990	0.57	0.56
2170	1.91	0.59
2690	0.88	0.58

#### **Packaging Information**

Number of Antenna/ Carton : 12 pcs Weight of 1 pc of antenna : 500 g Size of the carton : 495 x 220 x 270 mm Weight of the carton : 7 kg

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