



Antenna description

AM/FM1 antenna:

- Type: Compact printed spiral antenna
- HW customer PN: 50534820 24516

Items	Requirements				Remark
	Min.	Typ.	Max.	Unit	
AM Gain ($C_A = 3.3\text{pF}$, $C_{LOAD} = 490\text{pF}$)		28		dB	Harmonized Method
AM Insertion Gain Flatness	-5		+5	dB	LW
	-2.5		+2.5		MW
AM Gain variation vs voltage		± 1.5		dB	
AM Gain variation vs temperature		± 1.5		dB	
FM Gain		6		dB	
FM Gain Flatness		± 2			
FM Gain variation vs voltage		± 1.5		dB	
FM Gain variation vs temperature		± 1.5		dB	

FM2/DAB antenna:

- Type: Compact printed spiral antenna
- HW Customer PN: 50535042 25016

Items	Requirements				Remark
	Min.	Typ.	Max.	Unit	
FM Gain		6		dB	ECE
FM Flatness		± 2			
FM Gain variation vs voltage		± 1.5		dB	
FM Gain variation vs temperature		± 1.5		dB	
DAB Gain		20		dB	III Band
		14		dB	L Band
DAB Flatness		± 2		dB	III Band
		± 2		dB	L Band
DAB Gain variation vs voltage		± 1		dB	Referred to min/max spec. Value
DAB Gain variation vs temperature		± 1		dB	Referred to min/max spec. Value

GNSS antenna:

- Shark antenna
- HW customer PN: 156113905

Items	Requirements				Remark
	Min.	Typ.	Max.	Unit	
Gain	28	31	34	dB	with 300mm pigtail
Gain Variation vs Voltage		± 1		dB	
Gain Variation vs Temperature		± 2		dB	

Bluetooth / WiFi antenna:

- Type: Folded Dipole Antenna
- HW customer PN: 50535044
- Isotropic Gain < -2dBi