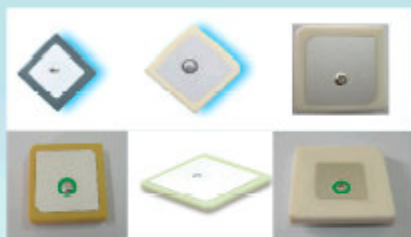


## Electrical specification



► Part number

**ANP 8 1575 C 4 Z T A**

AN : Antenna Group  
P : Antenna type [ P : patch ]  
S : Antenna Mode [ S : single ]  
1575 : Center frequency [ unit : MHz ]  
C : Size ( W x L ) [ A : 18x18, B : 20x20, C : 25x25, D : 35x35 ]  
4 : Substrate Thickness [ 1 : 1mm, 2 : 3mm, 3 : 2mm ]  
Z : Substrate Thickness [ Z : .0mm, A : .1mm, B : .2mm, ... , I : .9mm ]  
ex) 4Z: 4.0mm, 4A:4.1mm, 2C:2.3mm, 3Z:3.0mm  
T : Package type [ T : Tray ]  
A : Serial No.

► PATCH ANTENNA

Item	Unit	Specification									
Application		GPS					DAB	DMB	DUAL(GPS+DMB)		
Model No.	-	1580E3ZTA	1580A4ZTA	1580B4ZTA	1580C4ZTA	1580D3ZTA	2338C4ZTA	2642C4ZTA	1526D4ETA		
Dim. [LxWxT]	mm	13x13x3	18x18x4	20x20x4	25x25x4	35x35x3	25x25x4	25x25x4	35x35x4.5		
Operating freq.	MHz	1575.42 ± 1.023					2338 ± 6.25	2642.5	1575.42	2642.5	
Center freq.	MHz	1580	1580	1580	1580	1580	2338.5	2642.5	1575	2642.5	
Impedance	Ω	50	50	50	50	50	50	50	50	50	
Polarization	-	RHCP	RHCP	RHCP	RHCP	RHCP	LHCP	RHCP	RHCP	RHCP	
Gain @ Zenith	dBic typ.	1.0	3.0	3.0	5.0	4.0	5.0	4.5	0	3.0	
Axial ratio @ fc	dB max.	3	3	3	3	3	3	3	3	3	
Er		90	45	37	22	9	9	9	9	9	
Freq. Temp. coefficient	ppm/°C max.	20	20	20	20	20	20	20	20	20	
test ground	㎡	50	50	50	70	50	70	50	35	35	

## GPS External active antenna

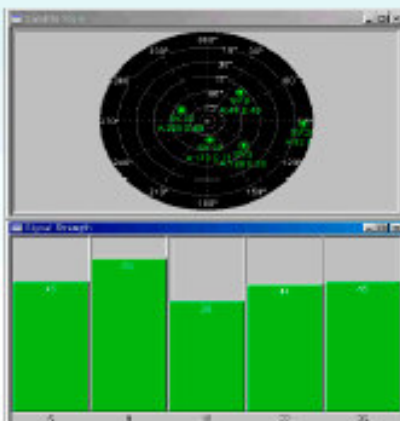
► Part number

**MAGE2503\*\*\*\***

MA : Partron antenna module  
G : GPS  
E : External Active  
25 : Patch ant. Size [ 25 : 25×25mm ]  
03 : Applied voltage [ 03 : 3V / 05 : 5V ]  
H : Connector type [ H : HFL ]  
F : Cable type [ F : FHSB ]  
T : package [ T : Tray ]  
A : serial number



► Specification



	ITEM	Spec.	Remark
Antenna	1) Operating frequency	1575.42 ± 1.023 MHz	
	2) Gain @ Zenith	5.0 dBic typ.	Ⓜ 70x70mm
	3) Polarization	R.H.C.P.	Ground plane
	4) Axial Ratio @ fc	3.0 dB max.	
	5) Size	25x25x4t	
LNA	6) Operating frequency	1575.42 MHz ± 5 MHz	
	7) Gain	28 dB typ.	
	8) Noise Figure	1.5 dB max.	Ⓜ normal temperature
	9) P 1dB	-35dBm	Ⓜ 1575.42MHz
	10) Outband Rejection	15 dB min.	Ⓜ fc - 50MHz
		20 dB min.	Ⓜ fc + 50MHz
Overall	11) Output V.S.W.R	1.5:1 max.	
	12) Overall Gain	25 dBic min.	includes cable loss
	13) Operating Voltage	3.0(5.0) Vdc	± 0.3v
	14) Consumption	17(31) mA max.	
	15) SDC	45x45x152 mm	
	16) Connector & Cable	RG-174(S) / Connector(SMA, SMB,BNC,NCX,etc)	cable loss: 1.0dB / meter.