客戶名稱	理立系統股份有限公司
Customer	
日期	2011 / 9/ 21
Date	
產品名稱	YA-200230M13-NF 200-230MHz 13dBi Yagi Directional Antenna
Product	
版本	1
REV	

# 茂祐企業有限公司

Tai Digiters Enterprise CO.,LTD

規 格 承 認 書

APPROVAL SHEET

客戶承認簽印	核准	主管	承辦
Customer Approved By	Approve	Chief	Responsible
	Kevin Tseng	Jackie	Fa Chen

### Model:YA-200230M13-NF

# 200-230MHz 13dBi Yagi Directional Antenna



Applications:	Features :	
• 200-230 MHz ISM Band		
13dBi Directional Mulitpoint applictions	DC Short lightning protection	
Point to Point Bridge	Behind and support is an aluminum	
	Outdoor antenna for public Hot spots	
	Includes tilt and swivel mast moun brackets	
	RoHS Compliant	





### **Electrical Specifications**

Frequency Range	200MHz-230MHz
V.S.W.R (MAX)	1.5:1
Antenna Type	Yagi Directional
Radiation	Directional
Gain (Avg)	13 dBi
Polarization	Vertical or Horizontal
Maximum Power	500 Watts
Vertical Beam-with	49 Deg
Horizontal Beam-with	64 Deg
Impedance	50 Ohm
F/B	Than 15
Antenna Design	Folded Dipole Balun Yagi
Connector	N-Female

### Mechanical Specifications

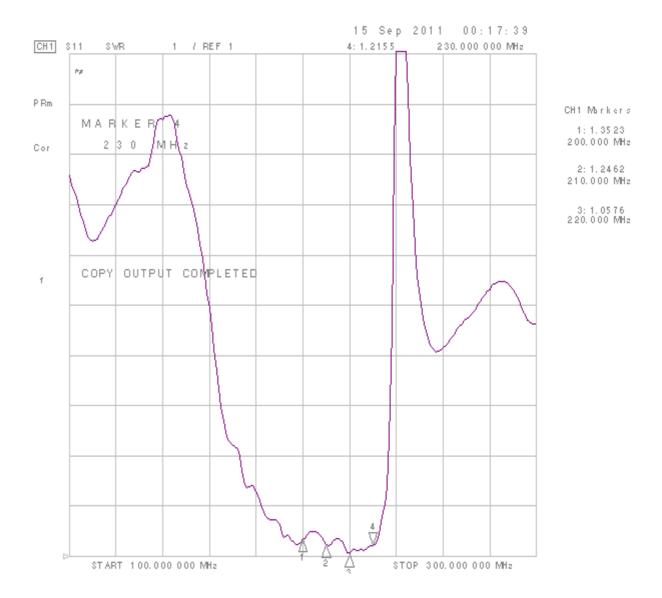
Length (MAX)	3723 cm
Diameter (MAX)	669X3 cm
Antenna Weight (G.W)	3500 g
Accessories (G.W)	500 g
Application	Outdoor
Radome Material	ABS + PC
Parts Material	Aluminum
Mount Style	3"Pole Mount
Mounting	ALL Stainless Steel
Wind Survival	Greater then 120MPH
Storage Temperature	-40 to +80
Operating Temperature	-40 to +60
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing
Safety,Emission and other	CE, FCC, RoHS,ISO

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#### Model:YA-200210M13-NF

### V.S.W.R



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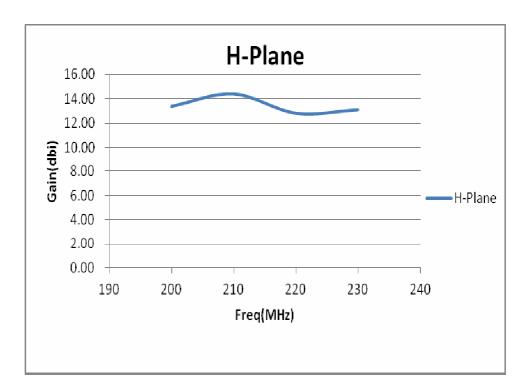
#### Model:YA-200230M13-NF

### **Gain Curve**

H-plane

MHz	Gain
200	13.40
210	14.41
220	12.84
230	13.12

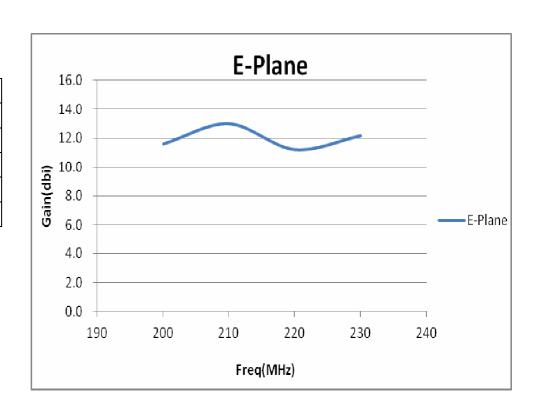
Average 13.4



#### E-Plane

Frequency	Gain
MHz	dBi
200	11.6
210	13
220	11.21
230	12.17

Average 12



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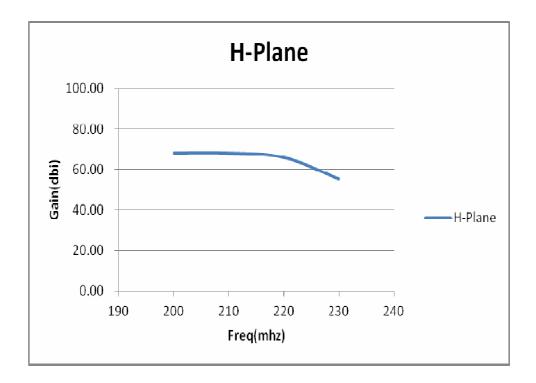
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## FPB (-3beam-with) Curve

H-plane

MHz	deg
200	68.15
210	68.1
220	65.88
230	55.35

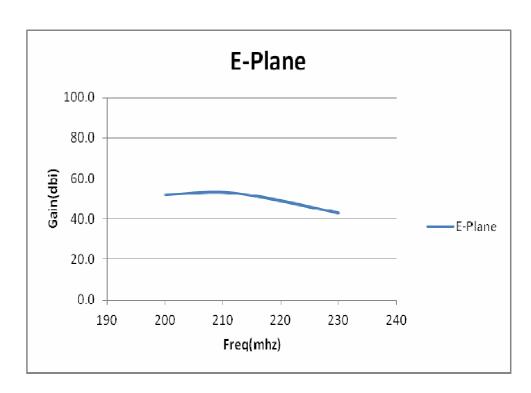
Average 64.4



#### E-Plane

Frequency	
MHz	deg
200	51.8
210	53.18
220	48.9
230	42.9

Average 49.2



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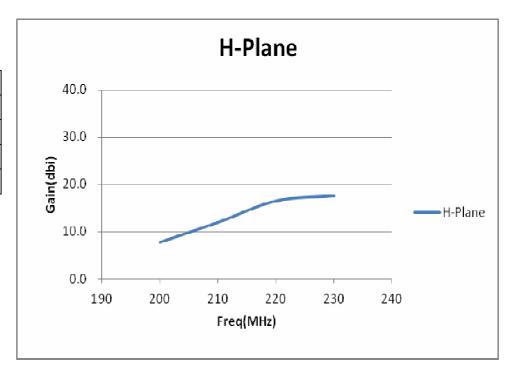
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## **FB( Front to Back Ratio)**

**H-PLANE** 

MHz	db
200	7.7
210	11.9
220	16.5
230	17.5

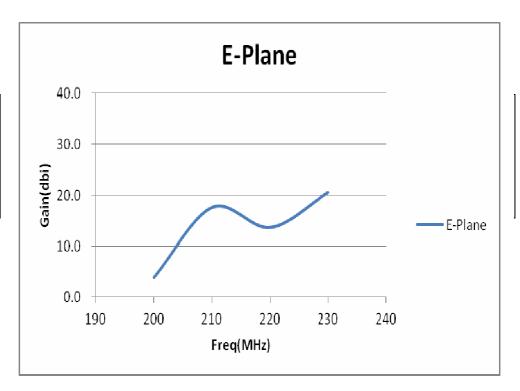
Average 13.4



**E-PLANE** 

MHz	db
200	3.9
210	17.69
220	13.69
230	20.7

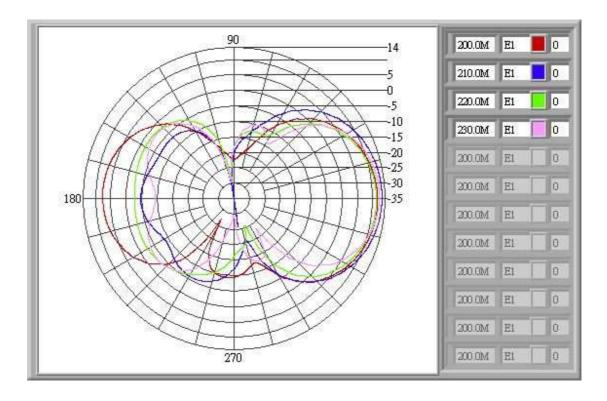
Average 14



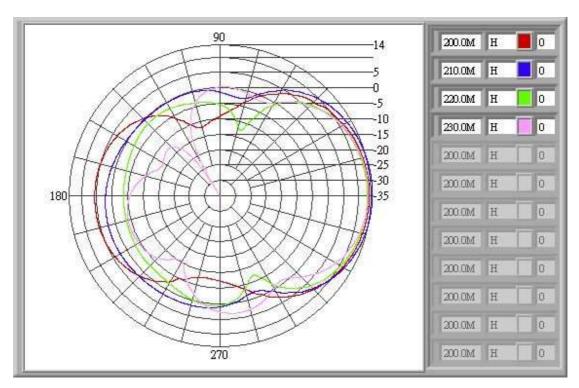
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Vertical E-plane co-pol ----- 3-dB beam-with=49°



H-plane co-pol ----- 3-dB beam-with=64 °

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