



FRACARRO

PENTA DISHES

Research, innovation and a sophisticated production process led to the realisation of an innovative dish with superior performances

PENTA



Both models key performances are:

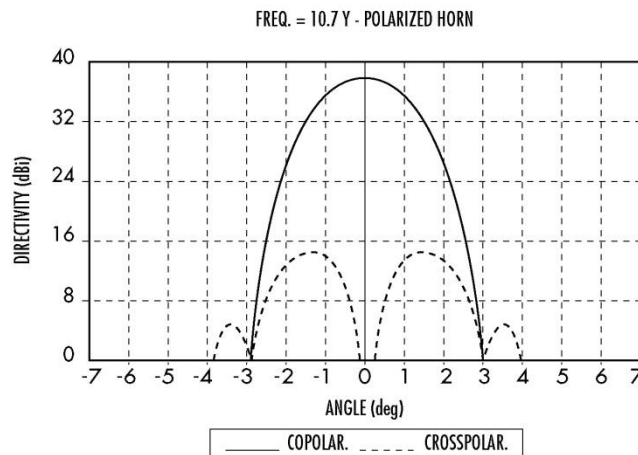
- Excellent protection from iso-frequency cross-polar interfering signals coming from the same satellite
- Excellent protection from co and cross-polar interfering signals coming from satellites positioned at $\pm 3^\circ$

These characteristics enable the Penta dish to be used in a double feed system (typically 6°) as well as a single feed system.

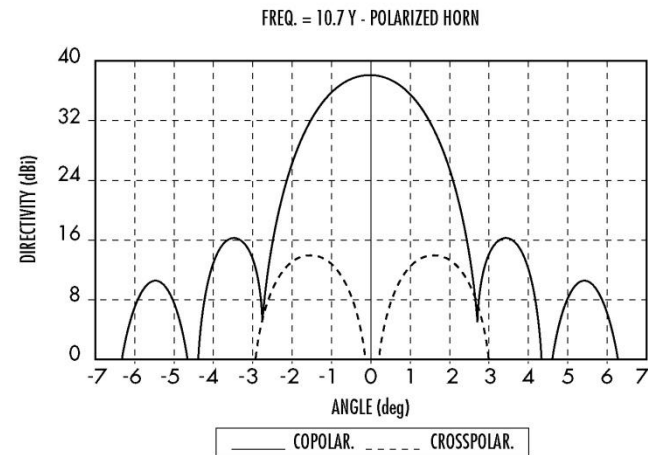
Polar Diagrams – single feed system



First side lobes at -34dB



First side lobes at -23dB



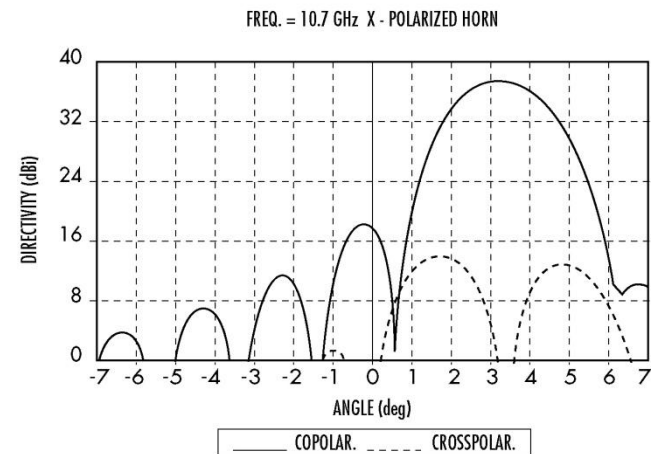
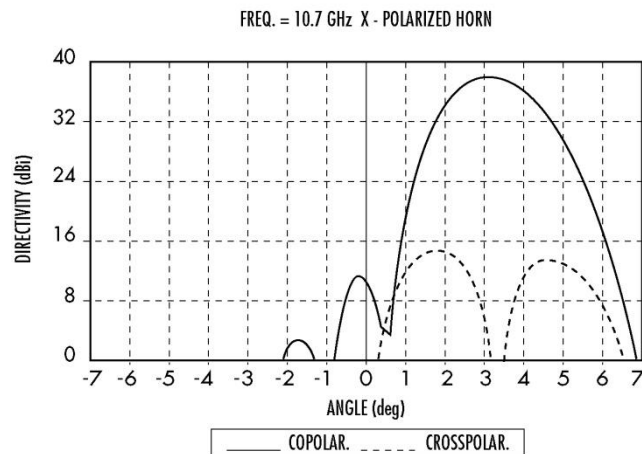
Polar Diagrams – double feed system



Small side lobes



Large side lobes



Specifications

	DIGIT	PENTA85
Frequency	10.7 - 12.75GHz	
Dimensions	624 x 624mm	775 x 775mm
Equivalent diameter	68cm	85cm
Offset angle	22.3°	22.3°
Efficiency	> 70%	
Gain at 10,95 GHz	36.5dB	39dB
Cross polarisation	>37dB	>38dB
First side lobe	<-32dB	<-34dB
Noise temperature	40°K at 30° elevation	
F/D ratio	0,7	0,7
3dB beamwidth	3°	2.2°
LNB clamp	23-28; 40; 60mm	
Elevation angle	60° top of mast	60° top of mast
	43° bottom of mast	41° bottom of mast
Mast clamp	35 - 80mm	
Back structure	Steel - aluzinc	
Wind load at 150Km/h	53Kg	81Kg
Wind resistance	Operating (72Km/h) maximum gain loss 1dB	
	Survival (144Km/h) no damage	
	Destructive (216Km/h) permanent damage	