

SKU: 17-1800XPOL

Telco XPOL MIMO Industrial Class Solid Dish Antenna

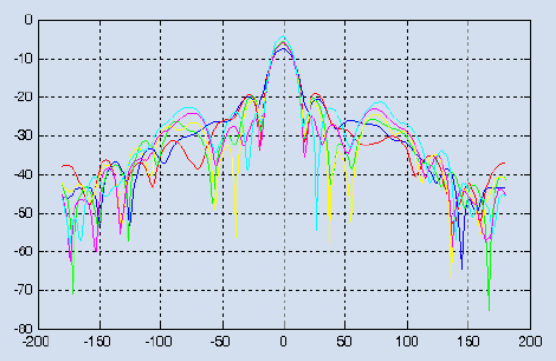
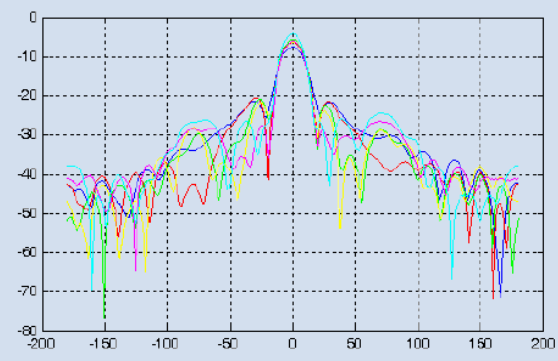
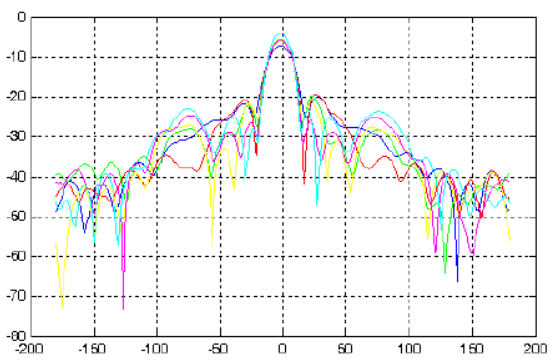
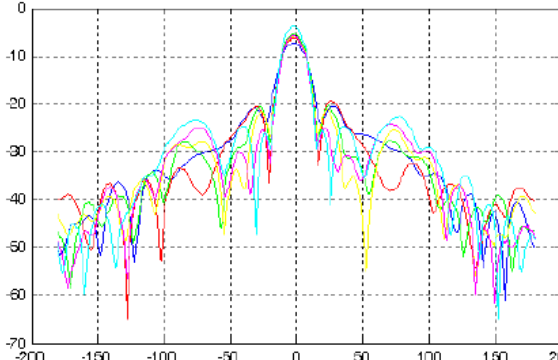
- Dual-polarised antenna feed with high isolation
- Industrial grade high precision dish
- High gain, high F/B ratio
- Two low PIM N Female connectors
- Very high gain across 1800 and 2100MHz LTE bands.

This heavy duty solid dish antenna has been specifically designed by Telco for operation on 4G LTE MIMO networks. This antenna has an incredibly low VSWR and $< -130\text{dBc}$ PIM making it not only the ideal antenna for commercial and industrial 4G applications, but also suitable for broadcast and carrier applications.

With a heavy duty design, the key to this antennas unmatched performance on 4G networks is the solid dish and microwave-class feedhorn element. The finely machined 0.6m parabolic reflector provides a dead stable main lobe, with sidelobe interference being effectively eliminated with its -30dB typical F/B ratio. This is extremely important as a cleaner signal will allow the modem to negotiate a more complex (and faster) method of modulation. The 17dBi gain was chosen to maintain a beamwidth above 15 degrees to permit operation in non line of sight applications.

See below for electrical & mechanical specification data.



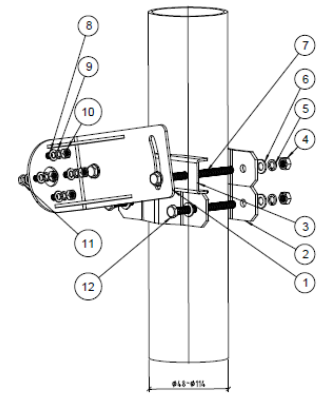
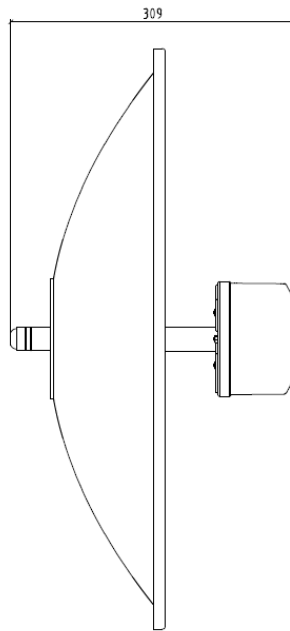
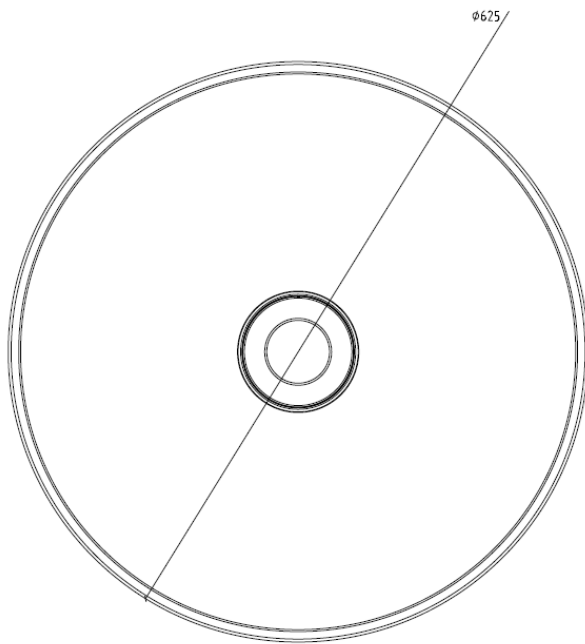
Electrical Specifications		
Frequency Range:	1710-2170MHz	
Input Impedance:	50Ω	
VSWR:	<1.8:1	
Polarisation:	±45° (XPOL)	
Vertical Beamwidth:	15° (± 3°)	
Horizontal Beamwidth:	15° (± 3°)	
Front to Back Ratio:	>25dB (30dB typical)	
Cross Pol Isolation:	>28dB (30dB typical)	
PIM IMD (3rd Order):	<-130dBc	
Radiation:	Directional	
Maximum Power:	100Watts	
Radiation Patterns	+45 Polarity	-45 Polarity
Vertical:		
Horizontal:		

Test Item	Technical Requirement	Unit	Tested Frequency	Result	
				+45	-45
Frequency Range	1710-2170	MHz	Whole frequency band	1710-2170	
VSWR	≤1.8	/	1710MHz	1.08	1.09
			1795MHz	1.69	1.59
			1880MHz	1.66	1.64
			1920MHz	1.45	1.54
			2045MHz	1.33	1.29
			2170MHz	1.46	1.59
Isolation between Ports	≥28	dB	1710MHz	-35	
			1795MHz	-34	
			1880MHz	-33	
			1920MHz	-32	
			2045MHz	-33	
			2170MHz	-35	
PIM 3rd	≤-130	dBc	1900MHz	-137	-131
Front to Back Ratio	≥25	dB	1710MHz	33	31
			1795MHz	31	33
			1880MHz	34	31
			1920MHz	33	33
			2045MHz	39	33
			2170MHz	38	38

Mechanical/Environmental Specifications

Construction:	Solid Aluminium reflector, galvanised mounting brackets
Cable:	167mm Semi-Flex SF141 Blue PVC Tails
Connector:	2x N-Type Female (Low-PIM White Bronze)
Wind Rating:	198km/hr
Temperature:	-40°C +60°C
Weight:	4.0kg incl mounting kit
Dimensions:	600 x 500mm (Ø x D)
Packing Dimensions:	815 x 660 x 200mm (L x W x H)
Mounting	35-110mm Ø pole

CAD Drawing



12	SCREWS M10X120	GB5783	2	0.235
11	SCREWS M8X30	GB5782	4	0.235
10	NUT M10	GB5782	4	0.235
9	SPRINGWASHERS	GB93	4	0.235
8	WASHER 8	GB95	8	0.235
7	SCREWS M10X150	GB5783	2	0.235
6	WASHER 10	GB95	8	0.235
5	SPRINGWASHER 0	GB93	4	0.235
4	NUT M10	GB6170	4	0.235
3	U CLAMP	R011101D	1	0.235
2	CLAMP	R011102D	3	0.235
1	L CLAMP	R011103D	1	0.235
No.	Name	Code	Qty	Note