



The new twin beam (split beam) antenna offers excellent horizontal and vertical pattern control in 2 sectors with 60 degrees of separation in azimuth. It is ideal choice for ultra-high dense urban areas. It provides a solution to easily upgrade from a standard 3 sector site to a 6 sector site without adding additional antennas. The wideband design allows the antenna to be used in the 800 & 900 MHz bands. Additionally, two sectors can be vertically electrical tilted independently.

FEATURES / BENEFITS

- Twin beam (split beam) with 4 ports — supports two 33 degree sectors with 60 degrees of separation in azimuth
- High gain design — ideal for coverage penetration
- Independent electrical downtilt — allows for greater flexibility in system design
- High suppression of upper sidelobes — reduces cell interference
- Designed with low windload — minimizes tower loading
- Optionally with RET - can be retrofitted later



Technical features

ELECTRICAL SPECIFICATIONS

Electrical Specification Header		ELECTRICAL SPECIFICATIONS R1	
Frequency Band	Mhz	790-890	890-960
Polarization	-	Slant +/- 45	Slant +/- 45
Impedance	Ohms	50	50
Passive Intermodulation	dBc		
Maximum Effective Power per Port	Watts	300	300
Gain	dBi	18.5	18.8
VSWR	-	<1.5:1	<1.5:1
Return Loss	dB	>14	>14
Cross Polar Isolation	dB	>30	>30
Azimuth Beamwidth 3dB	Deg	37.6+/-2.7	34+/-1.3
Front-to-Back , at +/-30, Total Power	dB	>23.4	>25.1
Elevation Beamwidth 3 dB	Deg	10.4+/-0.6	9.5+/-0.4
Electrical Downtilt	Deg	0 to 10	0 to 10
Elevation Downtilt Deviation	Deg	<1.16	<0.61
First Upper Side Lobe Suppression	dB	>18.6	>18.6



ELECTRICAL SPECIFICATIONS

Electrical Specification Header	ELECTRICAL SPECIFICATIONS R2		
Frequency Band	Mhz	790-890	890-960
Polarization	-	Slant +/- 45	Slant +/- 45
Impedance	Ohms	50	50
Passive Intermodulation	dBc		
Maximum Effective Power per Port	Watts	300	300
Gain	dBi	18.4	18.6
VSWR	-	<1.5:1	<1.5:1
Return Loss	dB	>14	>14
Cross Polar Isolation	dB	>30	>30
Azimuth Beamwidth 3dB	Deg	38.3+/-2.3	34.7+/-1.3
Front to Back n at +/- 30°, Total Power	dB	>23	>23.7
Elevation Beamwidth 3 dB	Deg	10.4+/-0.7	9.5+/-0.4
Electrical Downtilt	Deg	0 to 10	0 to 10
Elevation Downtilt Deviation	Deg	<0.87	<0.77
First Upper Side Lobe Suppression	dB	>20	>20.3

MECHANICAL SPECIFICATIONS

Dimensions - H x W x D	mm (in)	2100 x 600 x 150 (82.7 x 23.6 x 5.9)	
Weight (Antenna Only)	kg (lb)	45.6 (100.6)	
Packing size- HxWxD	mm (in)	2355 x 740 x 340 (92.8 x 29.2 x 13.4)	
Shipping Weight	kg (lb)	59 (130.1)	
Connector type		4 x 7-16 DIN Female at bottom	
Adjustment mechanism		RET solution	
Radome Material / Color		Fiber Glass / Light Grey RAL7035	

TESTING AND ENVIRONMENTAL

Temperature Range	°C (°F)	-40 to 65 (-40 to 149)	
Lightning protection		Direct Ground	
Survival/Rated Wind Velocity	km/h	200 (160)	
Wind Load @Rated Wind Front	N	1131	
Wind Load @Rated Wind Side	N	309	
Wind Load @Rated Wind Rear	N	1131	

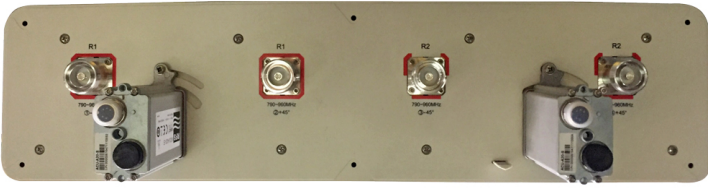
ORDERING INFORMATION

Order No.	Configuration	Mounting Hardware	Mounting pipe Diameter	Weight
APXV3EE20A-C	Manual tilt control	Included	50-115mm	59.0 kg
APXV3EE20A-C-A20	External RET included	Included	50-115mm	60.0 kg

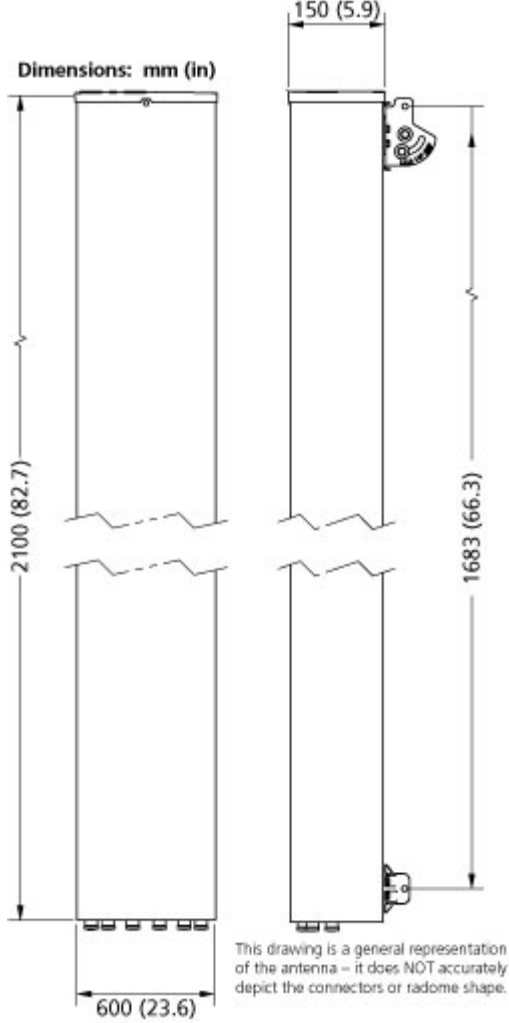


APXV3EE20A-C-A20

Twin Beam Dual Polarized Antenna, 790-960, 33deg, 18dBi, 2.1m, VET, 0-10deg



APXV3EE20A-C-A20_end_plate



APXV3EE20A_drawing



Antenna_Array_APXV3EE20A

External Document Links

Notes

All electrical parameters are compliant with BASTA NGMN 9.6 requirements.

Available Configurations

APXV3EE20A-C — No ACU included — Weight 59.0 kg (incl. mounting kit)

APXV3EE20A-C-A20 — (2) Pre-commissioned external ACUs included — Weight 60.0 kg (incl. mounting kit)

(Weight refers to shipment weight.)



PRODUCT DATASHEET

APXV3EE20A-C-A20

Twin Beam Dual Polarized Antenna, 790-960, 33deg, 18dBi, 2.1m, VET, 0-10deg

