

Optimizer® Side-by-Side Dual Polarized Antenna, 1710-2170, 65deg, 17.5dBi, 1.3m, VET, 0-10deg, RET

A combination of two X-Polarized antennas in a single radome, the RFS Quad-Pol antennas are designed for applications requiring a minimum number of antennas at a cell site and reduced tower loading. They offer the rugged construction of our new H Series of high band antennas that feature both high RF performance and energy efficiency. They are ideal for GSM1800, PCS, UMTS and Mobile TV networks where high gain is required. These antennas are especially well suited for MIMO applications.

FEATURES / BENEFITS

- Two x-polarized broadband panels in a single radome — reduced tower loading
- Rugged construction — high reliability
- Superior gain tracking — difference between UL and DL <1dB
- Stable azimuth horizontal beamwidth
- Low PIM — no system down-time, high call quality and reduced number of dropped calls
- Excellent upper sidelobe suppression — allows strong mechanical tilt
- Wideband frequency performance — enables future growth and increases flexibility
- High front-to-back ratio
- Optional remote tilt — can be retrofitted
- AISG compatible remote tilt available



APXVRR13T2-C

Technical features

ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	1710-1880	1850-1990	1920-2170
Gain	dBi (dBd)	16.8 (14.7)	17.1 (15.0)	17.5 (15.4)
Horizontal Beamwidth	deg	67	65	66
Vertical Beamwidth	deg	7.6	7.2	6.6
Electrical Downtilt Range	deg	0-10		
1st Upper Sidelobe Suppression	dB	> 16		
Upper Sidelobe Suppression	dB	> 16		
Front-To-Back Ratio	dB	> 26		
Polarization		Dual pol +/-45°		
VSWR		< 1.5:1, < 1.5:1, < 1.5:1		
Isolation between Ports	dB	> 28		
Isolation Between Bands	dB	> 28		
3rd Order IMP @ 2 x 43 dBm	dBc	≥150		
7th Order IMP @ 2x38 dBm	dBc	N/A, N/A, >170		
Impedance	Ohms	50		
Maximum Power Input	W	300		
Beamwidth Approximate	deg	65		
Frequency/Operating Band		3G/UMTS (Single, Broad, Dual and Triple-Band) AWS Band (1710-1755, 2110-2155 MHz)		
Antenna Type		Dual Polarized-Side by Side		
Electrical Down Tilt Option		Variable		

Discontinued product APXVRR13T2-C

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MECHANICAL SPECIFICATIONS

Lightning Protection		Direct Ground
Connector Type/Location		(4) 7-16 Long Neck Female/Bottom
Dimensions - HxWxD	mm (in)	1340 x 288 x 118 (52.8 x 11.3 x 4.6)
Weight w/o Mtg Hardware	kg (lb)	10 (22.1)
Weight w/ Mtg Hardware	kg (lb)	14 (30.8)
Survival/Rated Wind Speed	km/h (mph)	200 (125) / 160 (100)
Wind Load @ Rated Wind, Front	N (lbf)	443.1 (99.6)
Wind Load @ Rated Wind, Max.	N (lbf)	478.3 (107.5)
Wind Load @ Rated Wind, Side	N (lbf)	182.2 (40.9)
Wind Load @ Rated Wind, Rear	N (lbf)	478.3 (107.5)
Mount Type		Downtilt
Height (Approximate)	ft.	4.5

TESTING AND ENVIRONMENTAL

Operation temperature	°C (°F)	-40 to 60 (-40 to 140)
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MATERIAL

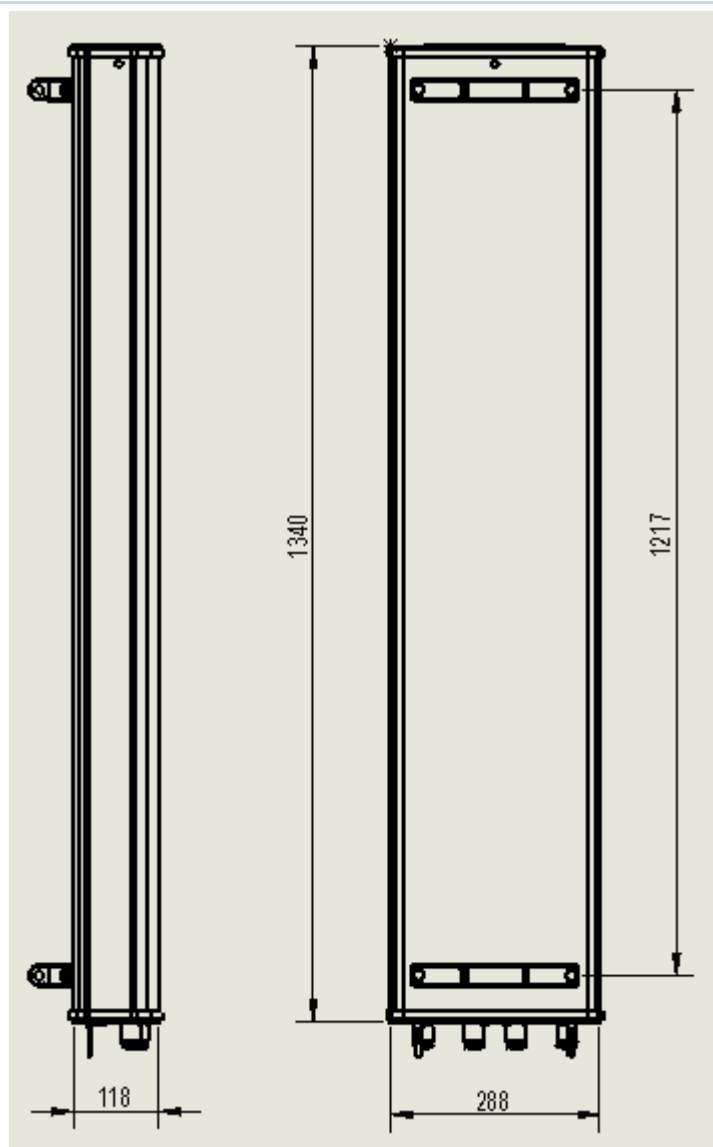
Radome Material/Color		PVC/Light Grey RAL7035
Mounting Hardware Material		APM40-6
Radiating Element Material		Aluminum
Reflector Material		Aluminum

ORDERING INFORMATION

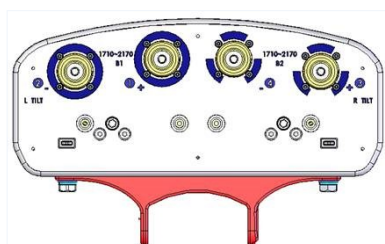
Shipping Weight	kg (lb)	17 (37.5)
Packing Dimensions, HxWxD	mm (in)	1540 x 374 x 266 (60.6 x 14.4 x 10.5)
Mounting Hardware		APM40-6
Mounting Pipe Diameter	mm (in)	60 - 120 (2.36 - 4.72)
Mounting Hardware Weight	kg (lb)	4 (8.8)

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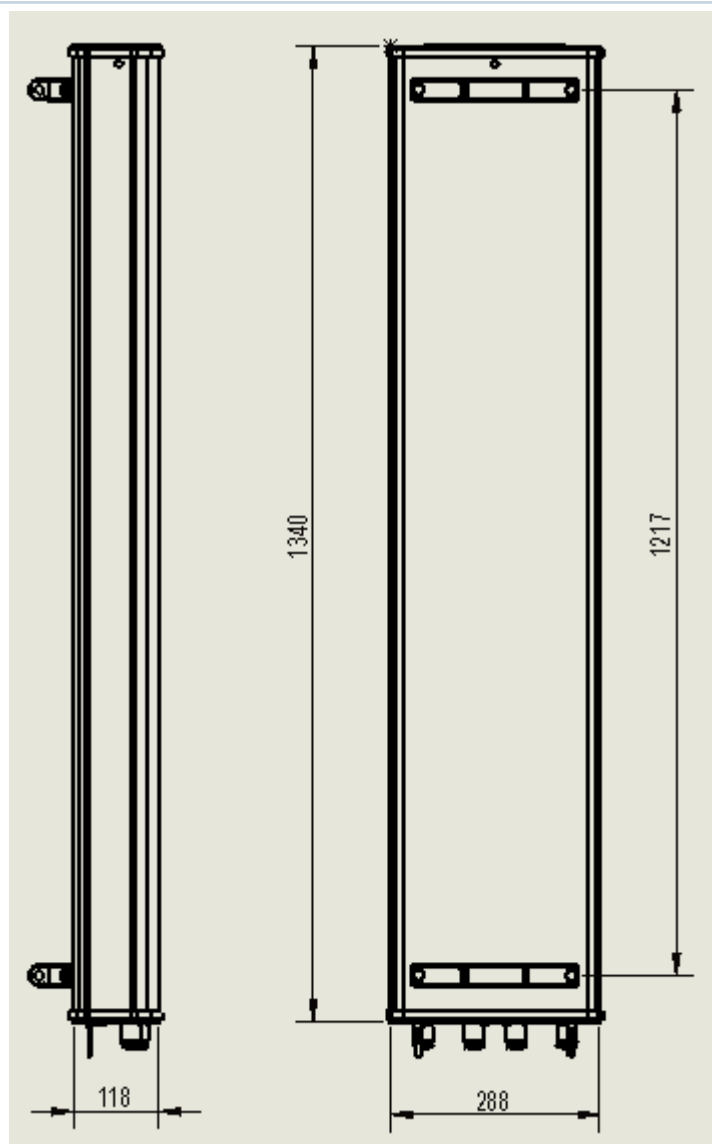
APXVRR13T2-C dimension



APXVRR13T2-C bottom

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APXVRR13T2-C dimension

External Document Links

[Manual Overdrive](#)

[APM40 Series Installation Instructions](#)

Notes

Available Configurations

- APXVRR13T2-C – No ACU included – Shipping Weight 17kg.
- APXVRR13T2-C-A20 – (1)Pre-commissioned ACU included – Shipping Weight 18kg.