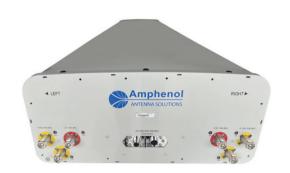


APXV4ALL24-U-J20 APXV4ALL24-V-J20

Features

- Narrow 499 mm radome for reduced windloading and easier zoning
- MIMO 2x2 in low-band and 4x4 mid-band
- Integrated and field replaceable RET
- ACU model number: ACU-X20-N2
- Ships in VSRET mode
- Compliant with AISG v2.0 and 3GPP
- Mechanical downtilt kit included
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -V-J20)



	Frequency Range (MHz)	(1x) 617-894	(2x) 1695-2690			
>	Array	■ R1	■ Y1	■ Y2		
VIEV	C	1-2	3-4	5-6		
OVERVIEW	Connector	2 PORTS	4 PORTS			
	Polarization	XPOL	OL			
PRODUCT	Azimuth Beamwidth (avg)	45°	45°			
<u>a-</u>	Electrical Downtilt	2-12° 2-12°				
	Dimensions	2432 x 499 x 215 mm (95.7 x 19.7 x 8.5 in)				

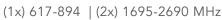
ORDERING OPTIONS Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT	MOUNTING HARDWARE WEIGHT
APXV4ALL24-U-J20	ACU-X20-N2 Field Replaceable RET Included	APM40-5E Beam Tilt Kit and APM40-E10T (included)	60-120 mm (2.4-4.7 in)	45 kg (99 lbs)	8.5 kg (19 lbs)
APXV4ALL24-V-J20	ACU-X20-N2 Field Replaceable RET Included	APM40-1E Direct Pipe No Tilt and APM40-E10T (included)	60-120 mm (2.4-4.7 in)	42.8 kg (94 lbs)	6.3 kg (14 lbs)





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APXV4ALL24-U-J20 APXV4ALL24-V-J20

ELECTRICAL SPECIFICATIONS

Amphenol ANTENNA SOLUTIONS

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Frequency R	Frequency Range			(1x) 617-894				
		MHz	617-698	806-894				
Polarization				±45°				
Goin	Over all Tilts	dBi	17.2 ± 0.7	17.9 ± 0.5	18.0 ± 0.5			
Gain	Max Gain	dBi	17.9	18.4	18.5			
Azimuth Bea	ımwidth (3 dB)	degrees	48° ± 3°	45° ± 3°	39° ± 3°			
Elevation Be	amwidth (3 dB)	degrees	10.4° ± 1°	9.4° ± 1°	8.4° ± 1°			
Electrical Do	wntilt	degrees	2-12°					
Impedance		Ohms	50Ω					
VSWR (Retur	n Loss)		1.5:1 (-14 dB)					
Passive Inter	modulation	dBc	-153 (3rd Order for 2x20 W Carriers)					
Front-to-Bac	k Ratio, Total Power, ± 30°	dB	22 25		25			
Front-to-Bac	k at 180° Copolar	dB	25	30	30			
Upper Side Lo	bbe Suppression, Peak to +20°	dB	17	16	15			
First Upper S	Side Lobe	dB	19	19 18				
Cross-Pol Over 10 dB HWB		dB	10 10		9			
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	20 20		20			
Maximum Ef	fective Power Per Port	Watts	300 W					
Cross Polar I	solation	dB	25	25	25			

Specifications follow BASTA guidelines.



APXV4ALL24-U-J20 APXV4ALL24-V-J20

ELECTRICAL SPECIFICATIONS

Amphenol ANTENNA SOLUTIONS

			_ 11 _ 12					
Frequency Range		MHz		(2x) 16 ^c	95-2690			
		MHz	1695-1880	1850-1990	1995-2200	2200-2690		
Polarization	า			±4	15°			
Gain	Over all Tilts	dBi	19 ± 0.4	19.2 ± 0.4	19.6 ± 0.6	19.6 ± 0.5		
Gain	Max Gain	dBi	19.4	19.6	20.2	20.1		
Azimuth Be	eamwidth (3 dB)	degrees	45° ± 4°	45° ± 4°	43° ± 2°	36° ± 4°		
Elevation B	Beamwidth (3 dB)	degrees	6.1° ± 0.5°	5.7° ± 0.5°	5.3° ± 0.5°	4.8° ± 0.6°		
Electrical D	Powntilt	degrees		2-	12°			
Impedance	2	Ohms	50Ω					
VSWR (Ret	urn Loss)		1.5:1 (-14 dB)					
Passive Inte	ermodulation	dBc	-153 (3rd Order for 2x20 W Carriers)					
Front-to-Ba	ack Ratio, Total Power, ± 30°	dB	23	23	23	23		
Front-to-Ba	ack at 180° Copolar	dB	30	30	30	30		
Upper Side I	Lobe Suppression, Peak to +20°	dB	15	15	15	14		
First Upper	r Side Lobe	dB	16	17	17	16		
Cross-Pol C	Over 10 dB HWB	dB	7	9	8	7		
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)		dB	17	17	15	14		
Maximum I	Effective Power Per Port	Watts	200 W					
Cross Polar	r Isolation	dB	25	25	25	25		

Specifications follow BASTA guidelines.

RET ACTUATOR

Frequency		MHz	617-894	1695-2690	
		IVIIIZ			
Model Number	•		ACU-X20-N2		
Number of RET Actuators			1		
RET ID			R1	Y1	
Input Voltage		Vdc	10-3	80V	
Power	Power Idle State, maximum		0.5W @ 10V,	1.5W @ 30V	
Consumption	Normal Conditions, maximum	Watts	4W @ 10V, 9W @ 30V		
Protocol			3GPP / AISG v2.0		
Tilt Change Du	ration		Less than 15 seconds, typical (may vary depending on antenna type and outdoor temperature)		
Precision		degrees	± 0.1°		
Tilt Change Ca	pability		18,000 minimum		
RET Interface			One AISG Male and One AISG Female		
Field Replaceat	ole Unit		Yes		
Location			Semi-internal		

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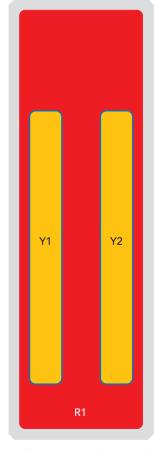
APXV4ALL24-U-J20 APXV4ALL24-V-J20

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	RET	AISG RET UID
■ R1	617-894 MHz	1-2	(2x) 4.3-10 Female	R1	RFxxxxxxxxxx-2R1
■ Y1	1695-2690 MHz	3-4	(2x) 4.3-10 Female	Y1	RFxxxxxxxxxxx-2Y1
■ Y2	1695-2690 MHz	5-6	(2x) 4.3-10 Female	1 11	



The illustration is not shown to scale.



APXV4ALL24-U-J20 APXV4ALL24-V-J20

MECHANICAL SPECIFICATIONS

Amphenol ANTENNA SOLUTIONS

Length			mm (in)	2432 (95.7)
Width			mm (in)	499 (19.7)
Depth			mm (in)	215 (8.5)
Net Weight	Net Weight - Antenna Only			29 (64)
		Frontal, Resultant	N (lbf)	816 (183)
Wind Load	93 mph)	Lateral, Resultant	N (lbf)	701 (158)
Rated at		Rear, Resultant	N (lbf)	969 (218)
150 km/h (9		Maximum, Resultant	N (lbf)	1627 (366)
		Maximum, Drag Force	N (lbf)	1439 (324)
Survival Wir	nd Speed		km/h (mph)	240 (150)
Connector	Туре			(6x) 4.3-10 Female at Bottom
Radome Color			Light Grey RAL7035	
Radome Material				ASA
Lightning P	Lightning Protection			Direct Ground
Shipping	Packing Size (Le	ength x Width x Depth)	mm (in)	2642 x 560 x 285 (104 x 22.0 x 11.2)

ENVIRONMENTAL SPECIFICATIONS

Environmental Standard		ETS 300 019
Operating Temperature	degrees	-40° to +60° C (-40° to +140° F)
Product Environmental Compliance		Product is RoHS Compliant



APXV4ALL24-U-J20 APXV4ALL24-V-J20

Amphenol

ANTENNA SOLUTIONS

ACCESSORIES Accessories may be ordered separately unless otherwise indicated

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit and Interface Bracket for Pole Diameter 60-120 mm (2.4-4.7 in) Refer to ordering options	APM40-5E and APM40-E10T	8.5 kg (19 lbs)
Direct Pipe No Tilt Bracket Kit and Interface Bracket for Pole Diameter 60-120 mm (2.4-4.7 in) Refer to ordering options	APM40-1E and APM40-E10T	6.3 kg (14 lbs)

INSTALLATION Please read all installation notes before installing product.

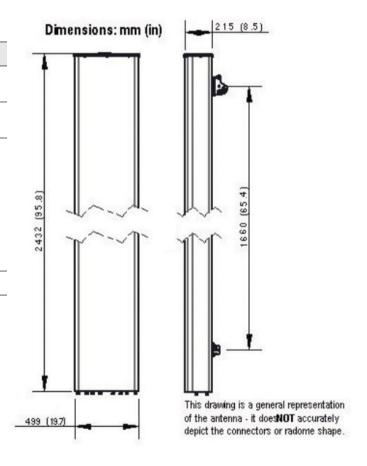


Always attach the antenna using all mounting points.

Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

APM40 Mounting Kit Series Installation Instructions



NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check External Document Links.

For Radiating Patterns: Request pattern files

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