COMMSCOPE®

Stadium and Multibeam Antenna

Selection Guide

Stadium and Multibeam Antennas														
Model	**Frequency (MHz)**	**Polarization**	**Tilt (Degree)**	**Gain (dBi)**	**HBW (Degree)**	**VBW (Degree)**	**USLS (dB)**	**F/B (dB)**	**Isolation (dB)**	**VSWR**	**Max. Input Power (W)**	**Weight (kg/lb)**	**Length (mm/in)**	**Width (mm/in)**
2x9NPA2010F	1710–2170	VPOL	±4°	27.0	5	5.8	18	30	16	1.43:1	300	140 / 308.6	1771 / 69.7	1486 / 58.5
5NPX1006F	1710–2170	±45°	6	23.0	11	11.0	18	30	25	1.43:1	300	30 / 66.1	890 / 35	865 / 34.1
CNLPA3055F	790–960	VPOL	0	11.0	55	55.5	-	38	-	1.5:1	50	30 / 66.1	850 / 33.5	1350 / 53.1
	1710–2170	VPOL	0	11.1	50	49.5	-	43	-	1.5:1	50			
	2300–2690	VPOL	0	11.7	46	46.3	-	45	-	1.5:1	50			
2CPX208M-V1	824–960	±45°	0–10	18.5	35	9.5	18	25	25	1.29:1	500	32 / 70.5	2090 / 82.3	510 / 20.1
2CPX208R-V1	824–960	±45°	0–10	18.5	35	9.5	18	25	25	1.3:1	500	32.5 / 71.7	2090 / 82.3	504 / 19.8
2NPX210R-V1	1710–2170	±45°	0–10	19.2	34	6.8	18	30	22	1.43:1	300	18.5 / 40.8	1330 / 52.4	370 / 14.7
2UNPX203.6R2	698–894	±45°	0–10	14.5	33	21.0	15	20	22	1.43:1	500	29.5 / 65	1745 / 68.7	564 / 22.2
	1710–2170	±45°	0–10	17.5	35	11.0	15	30	20	1.43:1	300			
HBXX-3817TB1-VTM	1710–2180	±45°	0–10	19.3	34	6.7	21	29	30	1.4:1	250	16.5 / 36.4	1390 / 54.7	301 / 11.9

Note: Specifications are subject to change without notice. See www.commscope.com for the most current information.

Product Specifications

2x9NPA2010F

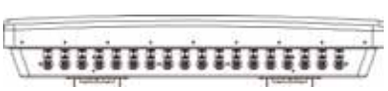
Argus® Multibeam Antenna, 1710–2170 MHz, 2x9 Beam Panel Antenna for Event Coverage. Two rows of beams spaced 8° in elevation (one set of beams 4° up and one set of beams 4° down) and 5° in azimuth. Upper and lower beams displaced in azimuth by 2.5°.

Electrical Specifications

Frequency Band, MHz	1710–1920	1920–2170
Gain, dBi	25.0	27.0
Beamwidth, Horizontal, degrees	6	5
Beamwidth, Vertical, degrees	7.2	5.8
USLS, dB	18	18
Front-to-Back Ratio at 180°, dB	30	30
Isolation, dB	16	16
VSWR | Return Loss, dB	1.43 | 15.0	1.43 | 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port, maximum, watts	300	300
Polarization	±45°	±45°

Mechanical Specifications

Color | Radome Material	Light gray | ASA
Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 18
Wind Loading, maximum	2800.0 N @ 160 km/h 629.5 lbf @ 160 km/h
Antenna Dimensions, L x W x D	1771.0 mm x 1486.0 mm x 283.0 mm | 69.7 in x 58.5 in x 11.1 in
Net Weight	140.0 kg | 308.6 lb



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Product Specifications

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5NPX1006F

Argus® Multibeam Antenna, 1710–2170 MHz, 5x 10-14° horizontal beamwidth, fixed electrical tilt

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ARGUS

Electrical Specifications

Frequency Band, MHz	1710–1920	1920–2170
Gain, dBi	22.0	23.0
Beamwidth, Horizontal, degrees	12	11
Beamwidth, Vertical, degrees	12.0	11.0
Beam Tilt, degrees	6	6
USLS, dB	18	18
Front-to-Back Ratio at 180°, dB	30	30
Isolation, dB	25	25
VSWR | Return Loss, dB	1.43 | 15.0	1.43 | 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port, maximum, watts	300	300
Polarization	±45°	±45°

Mechanical Specifications

Color | Radome Material	Gray | ASA, UV stabilized
Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 10
Wind Loading, maximum	1060.0 N @ 160 km/h 238.3 lbf @ 160 km/h
Antenna Dimensions, L x W x D	890.0 mm x 865.0 mm x 250.0 mm | 35.0 in x 34.1 in x 9.8 in
Net Weight	30.0 kg | 66.1 lb

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Product Specifications

COMMSCOPE®

CNLPA3055F

Argus® Stadium Tri-band Antenna, 790–960, 1710–2170, and 2300–2690 MHz, 50° horizontal beam. This triband antenna produces rectangular patterns with sharp cutoff for illuminating a section of the crowd. The three bands are internally triplexed, allowing a single connector interface to be used.

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ARGUS

Electrical Specifications

Frequency Band, MHz	790–960	1710–2170	2300–2690
Gain by all Beam Tilts, average, dBi	11.0	11.1	11.7
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.7	±0.6
Beamwidth, Horizontal, degrees	55	50	46
Beamwidth, Horizontal at 20 dB, degrees	91	83	75
Beamwidth, Horizontal Tolerance, degrees	±4.7	±5.2	±2.4
Beamwidth, Vertical, degrees	55.5	49.5	46.3
Beamwidth, Vertical Tolerance, degrees	±5.5	±5.1	±2.3
Beam Tilt, degrees	0	0	0
Front-to-Back Ratio at 180°, dB	38	43	45
VSWR | Return Loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	50	50	50
Polarization	Vertical	Vertical	Vertical

Mechanical Specifications

Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 1
Wind Speed, maximum	200.0 km/h | 124.3 mph
Antenna Dimensions, L x W x D	850.0 mm x 1350.0 mm x 120.0 mm | 33.5 in x 53.1 in x 4.7 in
Net Weight	30.0 kg | 66.1 lb

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Product Specifications

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2CPX208M-V1

Argus® Twin Beam Antenna, 824–960 MHz, 37° horizontal beamwidth, with manual electrical tilt (not upgradeable)

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ARGUS

Electrical Specifications

Frequency Band, MHz	824–890	890–960
Gain, dBi	18.0	18.5
Beam Centers, Horizontal, degrees	±27	±27
Beamwidth, Horizontal, degrees	39	35
Beamwidth, Vertical, degrees	10.0	9.5
Beam Tilt, degrees	0–10	0–10
USLS, dB	18	18
Front-to-Back Ratio at 180°, dB	25	25
Isolation, dB	25	25
VSWR | Return Loss, dB	1.29 | 18.0	1.29 | 18.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port, maximum, watts	500	500
Polarization	±45°	±45°

Mechanical Specifications

Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 4
Wind Loading, maximum	1500.0 N @ 160 km/h 337.2 lbf @ 160 km/h
Wind Speed, maximum	200.0 km/h | 124.3 mph
Antenna Dimensions, L x W x D	2090.0 mm x 510.0 mm x 108.0 mm | 82.3 in x 20.1 in x 4.3 in
Net Weight	32.0 kg | 70.5 lb

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Product Specifications

COMMSCOPE®

2CPX208R-V1

Argus® Twin Beam Antenna, 824–960 MHz, 37° horizontal beamwidth, internal electrical tilt with manual override.

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ARGUS

Electrical Specifications

Frequency Band, MHz	824–890	890–960
Gain, dBi	18.0	18.5
Beam Centers, Horizontal, degrees	±27	±27
Beamwidth, Horizontal, degrees	39	35
Beamwidth, Vertical, degrees	10.0	9.5
Beam Tilt, degrees	0–10	0–10
USLS, dB	18	18
Front-to-Back Ratio at 180°, dB	25	25
Isolation, dB	25	25
VSWR | Return Loss, dB	1.3 | 17.7	1.3 | 17.7
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port, maximum, watts	500	500
Polarization	±45°	±45°

Mechanical Specifications

Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 4
Wind Loading, maximum	1500.0 N @ 160 km/h 337.2 lbf @ 160 km/h
Wind Speed, maximum	200.0 km/h | 124.3 mph
Antenna Dimensions, L x W x D	2090.0 mm x 504.0 mm x 118.0 mm | 82.3 in x 19.8 in x 4.6 in
Net Weight	32.5 kg | 71.7 lb

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Product Specifications

2NPX210R-V1

Argus® Twin Beam Antenna, 1710–2170 MHz, 35° horizontal beamwidth, internal electrical tilt with manual override. Horizontal Beamwidth at ±31°.

Electrical Specifications

Frequency Band, MHz	1710–1920	1920–2170
Gain, dBi	18.2	19.2
Beamwidth, Horizontal, degrees	40	34
Beamwidth, Vertical, degrees	7.6	6.8
Beam Tilt, degrees	0–10	0–10
USLS, dB	18	18
Front-to-Back Ratio at 180°, dB	30	30
Isolation, dB	22	22
VSWR | Return Loss, dB	1.43 | 15.0	1.43 | 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150
Input Power per Port, maximum, watts	300	300
Polarization	±45°	±45°

Mechanical Specifications

Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 4
Wind Loading, maximum	720.0 N @ 160 km/h 161.9 lbf @ 160 km/h
Wind Speed, maximum	200.0 km/h | 124.3 mph
Antenna Dimensions, L x W x D	1330.0 mm x 370.0 mm x 120.0 mm | 52.4 in x 14.6 in x 4.7 in
Net Weight	18.5 kg | 40.8 lb

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Product Specifications

2UNPX203.6R2

Argus® Dual Band Twin Beam Antenna, 698–894 and 1710-2170 MHz, 37° horizontal beamwidth, internal electrical tilt.

Electrical Specifications

Frequency Band, MHz	698–790	790–894	1710–1920	1920–2170
Gain, dBi	13.8	14.5	16.2	17.5
Beam Centers, Horizontal, degrees	±28	±28	±30	±30
Beamwidth, Horizontal, degrees	40	33	42	35
Beamwidth, Vertical, degrees	24.0	21.0	12.0	11.0
Beam Tilt, degrees	1–16	1–16	0–10	0–10
USLS, dB	15	15	15	15
Front-to-Back Ratio at 180°, dB	20	20	30	30
Isolation, dB	22	22	20	20
VSWR | Return Loss, dB	1.43 | 15.0	1.43 | 15.0	1.43 | 15.0	1.43 | 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150
Input Power per Port, maximum, watts	500	500	300	300
Polarization	±45°	±45°	±45°	±45°

Mechanical Specifications

Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 8
Wind Loading, maximum	1550.0 N @ 160 km/h 348.5 lbf @ 160 km/h
Wind Speed, maximum	200.0 km/h | 124.3 mph
Antenna Dimensions, L x W x D	1745.0 mm x 564.0 mm x 127.0 mm | 68.7 in x 22.2 in x 5.0 in
Net Weight	29.5 kg | 65.0 lb

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Product Specifications

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HBXX-3817TB1-VTM

Andrew® Twin Beam Capacity Antenna, 1710–2180 MHz, 2x 38° horizontal beamwidth, RET compatible

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Electrical Specifications

Frequency Band, MHz	1710–1880	1850–1990	1920–2180
Gain by all Beam Tilts, average, dBi	18.9	19.1	19.3
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.6
Gain by Beam Tilt, average, dBi	0 ° | 18.7 5 ° | 19.0 10 ° | 18.9	0 ° | 18.9 5 ° | 19.2 10 ° | 19.1	0 ° | 19.3 5 ° | 19.5 10 ° | 19.0
Beam Centers, Horizontal, degrees	±27	±27	±27
Beamwidth, Horizontal, degrees	38	36	34
Beamwidth, Horizontal Tolerance, degrees	±1.5	±1.3	±2.2
Beamwidth, Vertical, degrees	7.5	7.1	6.7
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5
Beam Tilt, degrees	0–10	0–10	0–10
Horizontal Sidelobe, dB	20	20	20
USLS, dB	20	20	21
Gain Roll-off at Boresite, dB	9	9	9
Gain Roll-off at Boresite Tolerance, dB	±2	±2	±2
Front-to-Back Total Power at 180° ± 30°, dB	30	31	29
Isolation, Cross Polarization, port to port, dB	30	30	30
VSWR | Return Loss, dB	1.4 | 15.6	1.4 | 15.6	1.4 | 15.6
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250
Polarization	±45°	±45°	±45°

**Values calculated using NGMN Alliance N-P-BASTA v9.6*

Mechanical Specifications

Color | Radome Material	Light gray | Fiberglass, UV resistant
Connector Interface | Location | Quantity	7-16 DIN Female | Bottom | 4
Wind Loading, maximum	438.0 N @ 150 km/h 98.5 lbf @ 150 km/h
Wind Speed, maximum	241.0 km/h | 149.8 mph
Antenna Dimensions, L x W x D	1390.0 mm x 301.0 mm x 181.0 mm | 54.7 in x 11.9 in x 7.1 in
Net Weight	16.5 kg | 36.4 lb
Model with factory installed AISG 2.0 RET	HBXX-3817TB1-A2M

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