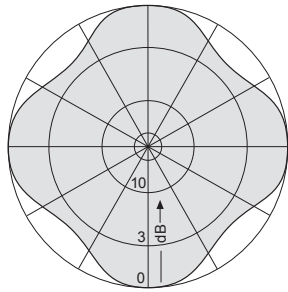


**LPTV / Class A
UHF-TV Broadband Antenna Selection Guide**

Low Power Broadband Omni-directional Antennas

- Low power Superturnstile antennas
- Plug and Play Antennas fully assembled
- Low wind load and low weight
- Horizontal polarization

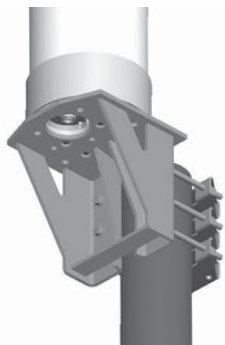


Typical Horizontal Radiation Pattern

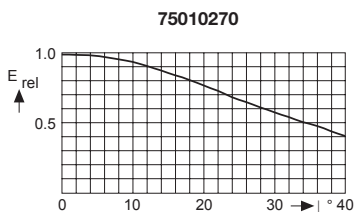


Order No.	75010270	75010271	75010272
Input connector	7-16 female	7-16 female	7-16 female
Max. power*	600 W	1 kW	1 kW
Frequency range	470 – 862 MHz	470 – 862 MHz	470 – 862 MHz
VSWR	≤ 1.2	≤ 1.2	≤ 1.15
Gain (at mid-band)	2.0 dBd	4.5 dBd	7.5 dBd
Impedance	50 Ω	50 Ω	50 Ω
Radome diameter	9 in	9 in	9 in
Height (approx.)	30 in	53 in	86 in
Weight	29 lb	35 lb	53 lb
Wind load (at 160 km/h)	25 lbf	44 lbf	78 lbf
Max. wind velocity	150 mph	150 mph	150 mph

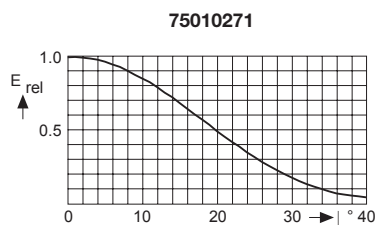
* at 40 °C ambient temperature



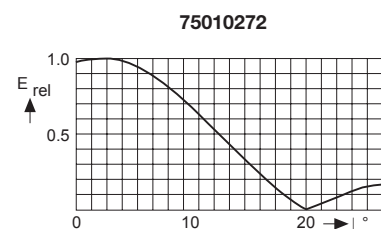
Optional mounting clamps:



75010270 use clamp **75310335** to mount to **3-4.7 in. OD pipe**



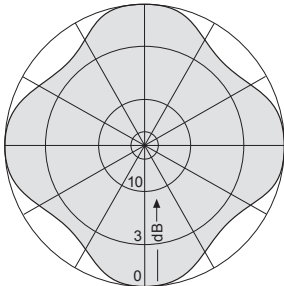
75010271 use clamp **75310237** to mount to **4-6.25 in. OD pipe**



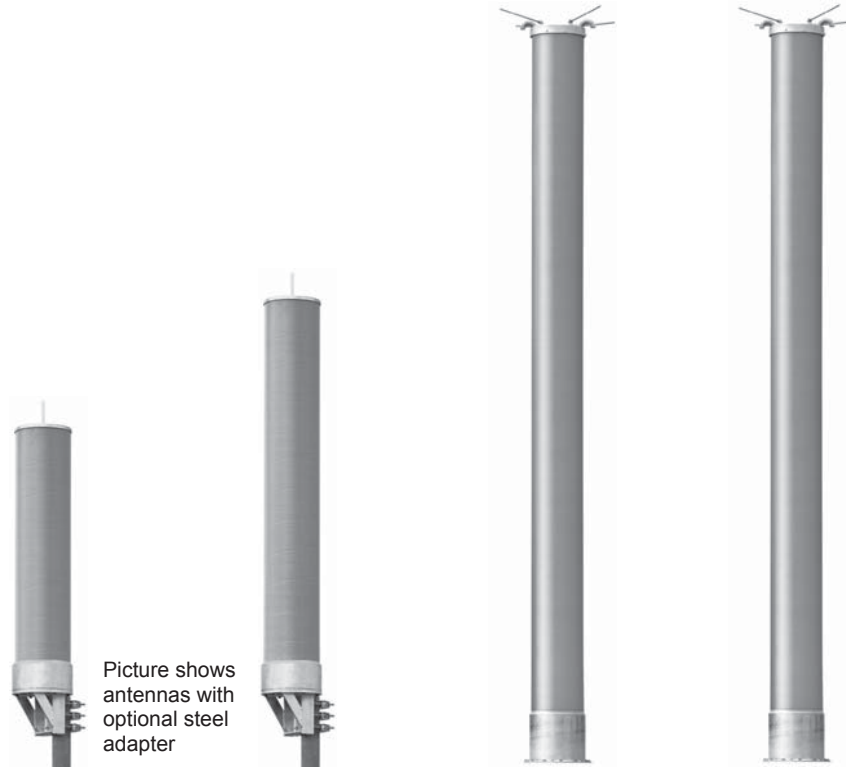
75010272 use clamp **75310384** to mount to **5.5-6.25 in. OD pipe**

Medium Power Broadband Omni-directional Antennas

- Medium and high power Superturnstile antennas
- Plug and Play Antennas fully assembled
- Low wind load and low weight
- Horizontal polarization



Typical Horizontal Radiation Pattern



Picture shows antennas with optional steel adapter

Order No.	75010066	75010067	75010068	75010069
Input connector	15/8" EIA flange	15/8" EIA flange	15/8" EIA flange	31/8" EIA flange
Max. power*	2.5 kW	5 kW	5 kW	7.5 kW
Frequency range	470 – 862 MHz	470 – 862 MHz	470 – 862 MHz	470 – 862 MHz
VSWR	≤ 1.1	≤ 1.1	≤ 1.1	≤ 1.1
Gain (at mid-band)	5.0 dBd	8.0 dBd	11.0 dBd	11.0 dBd
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Radome diameter	13 in	13 in	13 in	13 in
Height (approx.)	61 in	102 in	194 in	194 in
Weight	99 lb	155 lb	309 lb	320 lb
Wind load (at 100 mph)	74 lbf	133 lbf	270 lbf	270 lbf
Max. wind velocity	150 mph	150 mph	150 mph	150 mph

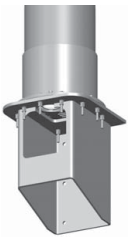
* at 104 F° ambient temperature
All gain figures without null fill and beam tilt losses

Optional Steel adapter for 75010066/67

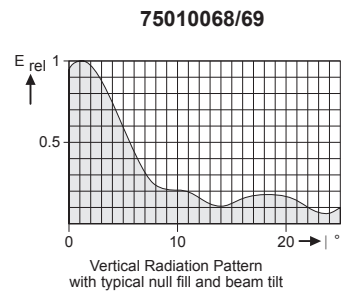
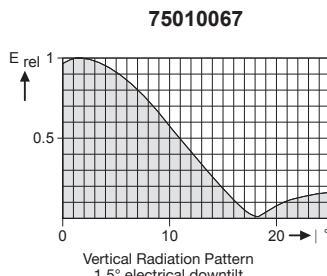
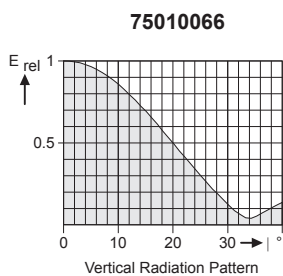


Steel adapter 75310322

Optional Steel adapters for 75010068/69

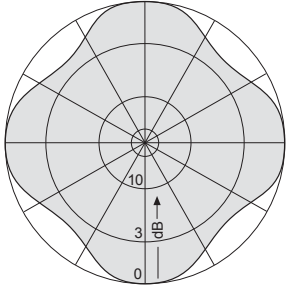


Steel adapter 75310416



Steel adapter 75310426

Medium / High Power Broadband Omni-directional Antennas



Typical Horizontal Radiation Pattern
Elevation patterns available upon request

For channel specific patterns contact:

Les Kutasi
Broadcast Sales Manager
(214)238-8835
lkutasi@kathrein.com

Michael W. Bach
Broadcast Sales Engineer
(214)238-8819
mbach@kathrein.com

Mike Johnson
Broadcast Sales Engineer
(214)238-8825
mjohnson@kathrein.com



Order No.	UTV-11/4	UTV-11/4/P	UTV-11/6/P/L	75010180
Input connector	1 ⁵ / ₈ " EIA flange	3 ¹ / ₈ " EIA flange	3 ¹ / ₈ " EIA flange	3 ¹ / ₈ " EIA flange
Max. power*	5 kW	10 kW	15 kW	15 kW
Frequency range	470 – 862 MHz	470 – 862 MHz	470 – 862 MHz	470 – 862 MHz
VSWR	≤ 1.1	≤ 1.1	≤ 1.1	≤ 1.1
Gain (at mid-band)	11 dBd	11 dBd	12 dBd	12 dBd
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Radome diameter	13 in	13 in	13 in	21 in
Height (approx.)	201 in	210.5	318 in	306 in
Weight	300 lb	510 lb	1040 lb	1435 lb
Wind load (at 100 mph)	350 lbf	410 lbf	955 lbf	1010 lbf
Max. wind velocity	140 mph	140 mph	140 mph	150 mph

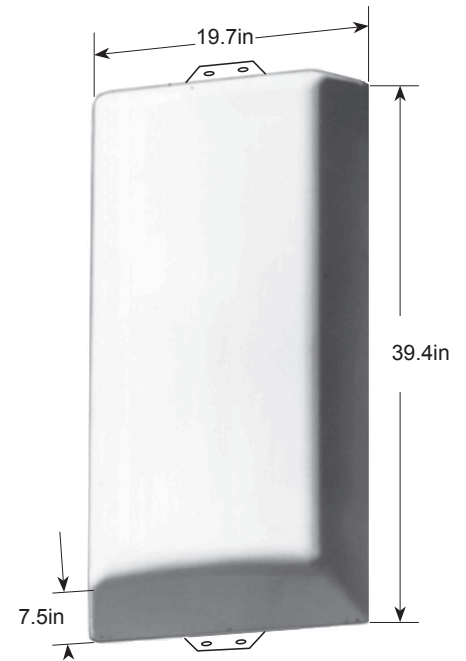
* at 104 F° ambient temperature
All gain figures without null fill and beam tilt losses

Available options for 75010180:
Hook-in ladder
Aviation warning light

75010210 Horizontally Polarized Broadband Panel Directional Arrays

(Also available in Elliptical Polarization)

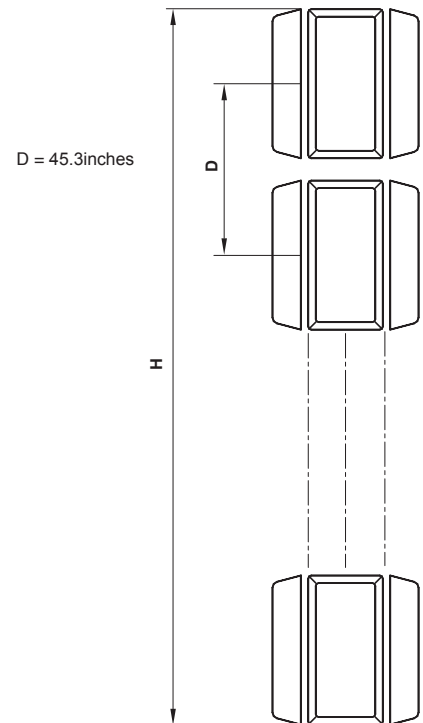
Input	Connectors according to IEC, EIA or DIN.
Max. power	According to customer's requirements.
Frequency	470 – 862 MHz
VSWR, typically	< 1.05 in the operating channels after tuning or < 1.15 in band.
Impedance	50 Ω
Polarization	Horizontal, vertical or elliptical
Internal connections	Connectors according to IEC, EIA or DIN are used throughout the system, allowing easy assembly and maintenance.
Vertical radiation pattern	Null fill and beam tilt upon request.
Horizontal radiation pattern	Directional or custom-designed.
Pressurization	Splitters and connecting cables can be supplied with dry air (please specify when ordering).



No. of bays	Panels per bay	Gain* (at mid-band)		Weight** in pounds	Antenna		Windload / lb (v = 100 mph)	
		dBd	times		Height H	Bay spacing	load in pounds	notes
1	1	11.4	13.8	28.6			184	*
	2	8.4	6.9	57.2	45.3in	0	293	**
	3	6.5	4.5	89.1			360	***
2	1	14.4	27.5	57.2			368	*
	2	11.4	13.8	114.4	7.05ft	45.3in	585	**
	3	9.5	8.9	178.2			720	***
4	1	17.4	55	114.1			736	*
	2	14.4	27.5	228.8	14.6ft	45.3in	1169	**
	3	12.5	17.8	356.4			1439	***
6	1	19.2	83.2	171.6			1104	*
	2	18.4	41.7	343.2	22.15ft	45.3in	1754	**
	3	14.3	26.9	534.6			2159	***
8	1	20.4	109.6	228.8			1472	*
	2	17.4	55	457.6	29.7ft	45.3in	2338	**
	3	15.5	35.5	712.8			2878	***

* Attenuation of the internal cabling and the gain-decrease in case of null fill in the vertical radiation pattern are not considered.
Approximate values for gain decrease:
cable attenuation: 0.2 – 0.5 dB
null fill: 0.3 – 1.0 dB
Gain figures are valid for the direction of maximum radiation (see diagrams on following page).

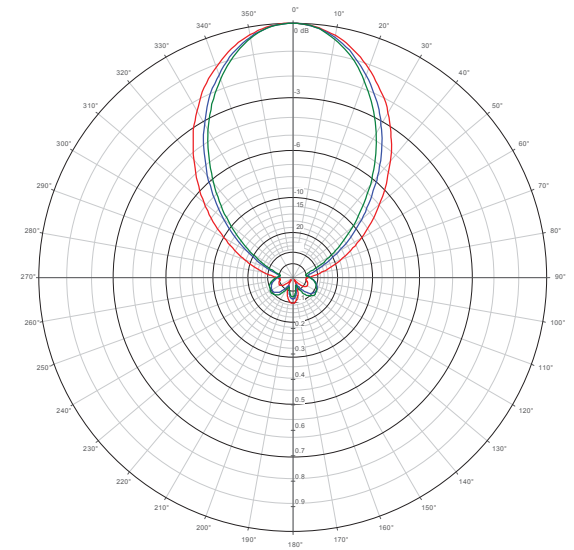
** Average values, depending on design and arrangement.
*** Only according to antenna and supplied mounting bracket.





Frequency (MHz): **470** **584** **698**

Elevation below horizon: **0°** **0°** **0°**

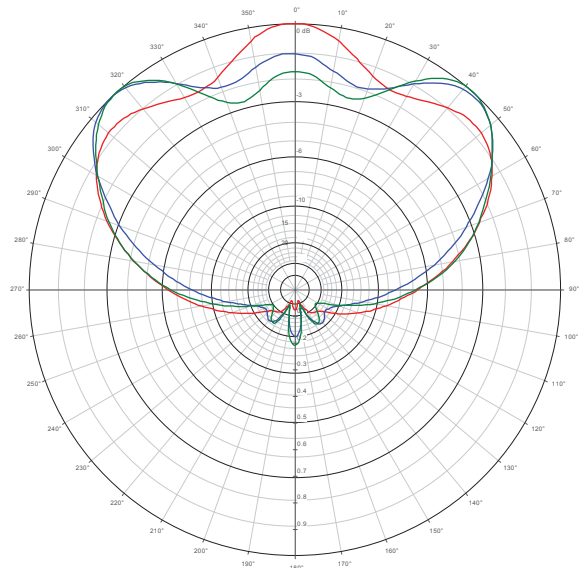


Pair of clamps for one UHF panel with attachment plate

Order No.	Suitable for tube mast of inches ∅	Weight lb
75310243	1.6-3.7	7.7



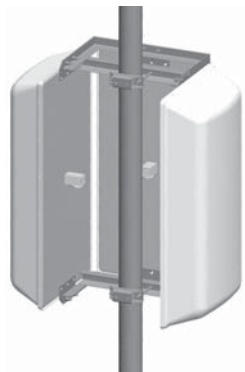
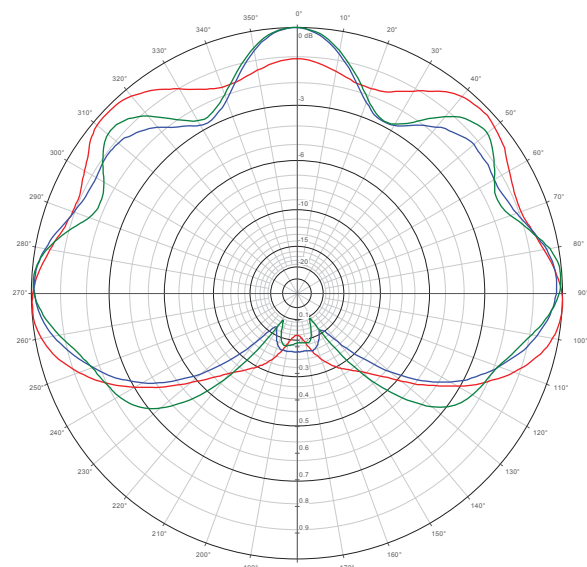
_x1 75010210 HRP



Pair of clamps for two UHF panels with attachment plate

Order No.	Suitable for tube mast of inches ∅	Weight lb	Radius inches	Angle α between directions of the two UHF panels
75310244	1.6-3.7	15.4	10.3	90°

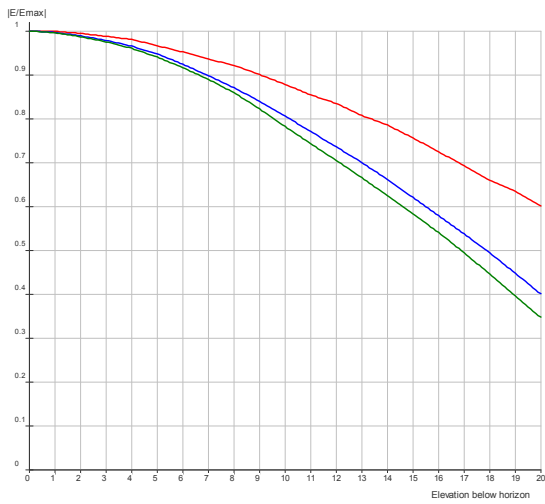
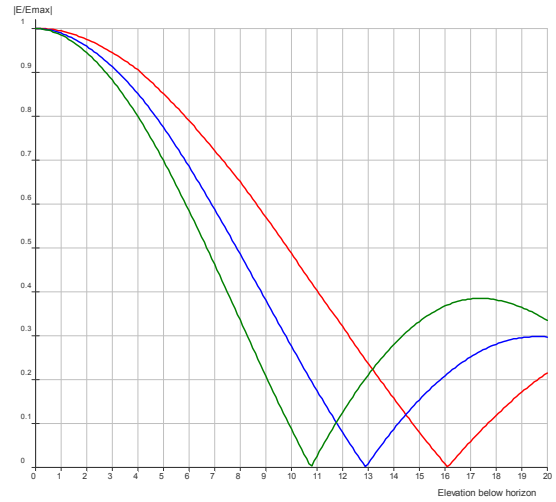
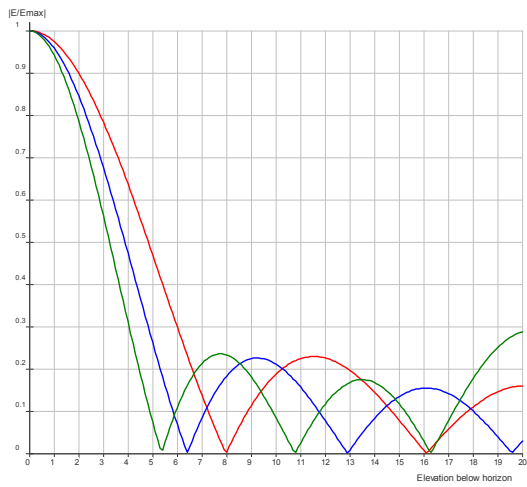
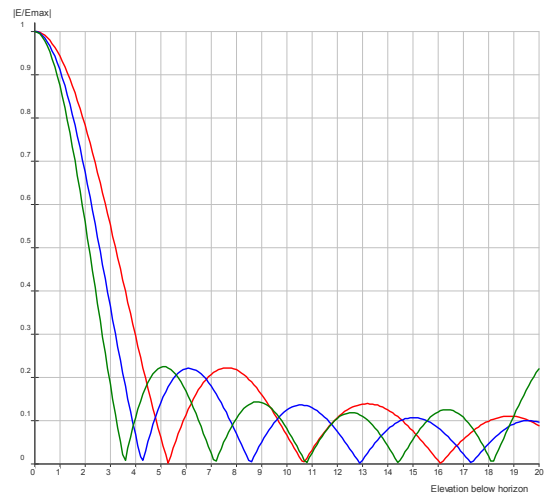
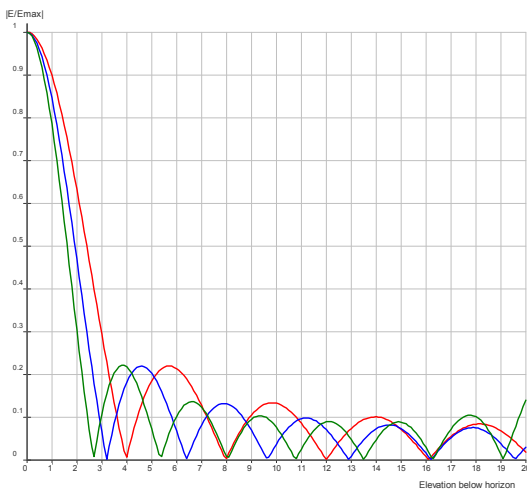
_x2 75010210 HRP



Pair of clamps for three UHF panels with attachment plate

Order No.	Suitable for tube mast of inches ∅	Weight lb	Radius inches	Angle α between directions of the three UHF panels
75310245	1.6-3.7	26.4	10.3	90°

_x3 75010210 HRP

Frequency (MHz): **470** **584** **698**Azimuth: **0°** **0°** **0°****VRP 1x_75010210 Array****VRP 2x_75010210 Array****VRP 4x_75010210 Array****VRP 6x_75010210 Array****VRP 8x_75010210 Array**

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