



Conical Horn Reflector Antennas

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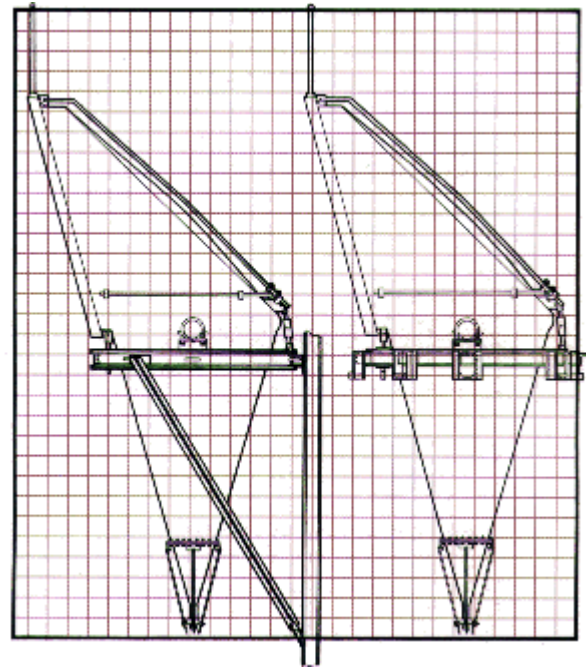
Expandable horn systems from the specialists

Horn antenna systems are AFC's specialty
 Antennas For Communications offers full design and manufacturing capabilities for Conical Horn Reflector Antenna Systems.

AFC's monolithic antenna design enables a level of horn precision that no metal horn can match. There are no seams on the reflector or radome to affect the radiation pattern, and no moisture intrusion, with AFC's proprietary molding process.

AFC is recognized as a world leader in the development of 7-, 8-, and 10-foot models offering performance which has long been the industry standard. Expandability and competitive price are additional benefits.

AFC offers its customers a complete line of waveguide, combining networks, couplers, hangers and dehydrators. Our experienced erection team is capable of handling any installation, whether atop a skyscraper or on a mountainside.

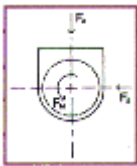


Advantages

The Critical Horn Advantages	The AFC Advantages
<ul style="list-style-type: none"> • Multi-band operation • Very low sidelobes • Superb 	<ul style="list-style-type: none"> • Experience works for you- Years as a telephone industry [-spec] horn supplier nationwide (and offshore). Ours is the standard. • Choice of mounts- Platform or side-tower mounts available to meet your application needs. • Color options- AFC white is standard, but your color can easily be matched. • Single frequency or multiband- AFC networks enable you to

- Superior cross-polarization discrimination (XPD)
- Single frequency or multiband AFC networks enable you to combine up to three bands on one antenna; AFC couplers are available with single- or dual-polarized operation from 1.7 GHz to 17 GHz.
- **Fully equipped horns-** Every AFC antenna arrives complete with stabilizers, adjustment tools, lightning rods, safety rails, waveguide hangers, and all necessary hardware: you need not "shop" for critical parts of an AFC system.

Conical Horn Specifications

<i>Electrical Specifications</i>				
Model Number	CH-7	CH-8	CH-10	
Electrical Aperture	6.5 ft.	7.5 ft.	9.5 ft.	
Operating Frequency	1.7 - 65 Ghz			
Sidelobe Standards	Exceed Standard "A" Performance			
Gain dBi	See AFC Digitized RPE Brochure (available upon request)			
VSWR	1.02 (40 dB) Maximum			
Flange	WC400, WC281, WC166			
<i>Mechanical Specifications</i>				
Model Number	CH-7	CH-8	CH-10	
Antenna Weight	850 lb.	1,100 lb.	1,300 lb.	
Side Tower Mount	STRM-7	STRM-8	STRM-10	
Mount Weight	575 lb.	750 lb.	950 lb.	
Vertical Tower Interface	4.5" OD Pipe, Wide Flange I or T-Beam			
Azimuth Adjustment (course, fine)	360, +/- 5 degrees			
Elevation Adjustment (fine)	+/-5 degrees			
Platform Mount	PM-7	PM-8	PM-10	
Mount Weight	420 lb.	450 lb.	675 lb.	
Tower Interface	KS-bolt pattern (8 leg)			
Azimuth Adjustment (course, fine)	360, +/- 5 degrees			
Elevation Adjustment (fine)	+/- 5 degrees			
<i>Environmental Specifications</i>				
Model Number	CH-7	CH-8	CH-10	
Wind Load at 125 mph				
	Axial Force (F_A lb.) Max.	2,304	2,957	4,570
	Side Force (F_S lb.) Max.	1,680	2,156	3,220

Side Force (F_S lb.) Max.	1,080	2,150	3,552
Moment Force (F_M ft.-lb.) Max.	1,512	2,218	4,284
Survival Rating	150 mph with 1 inch radial ice		
Temperature Rating	-40 to +122 degrees F		
Maximum Deflection in 70 mph Wind	Less than 0.1 degree with 1 inch radial ice		
Air Volume	180 ft. ³	264 ft. ³	500 ft. ³
Pressurization Maximum	16.0 IWC (0.68 PSI)		
Pressurization Operational	9.0 IWC (0.32 PSI)		
Leakage Rate	1 ft. ³ per day		
EIA Standards	RS-222C, RS-195B		

AFC manufactures, markets and sells worldwide satellite dish antennas, conical horn antennas, radomes, antenna feeds, microwave and waveguide components, ultra low loss waveguide transmission line TallGuide ®, and shelters. Our customers serve the broadcast, communications, radar, weather and cable industry, defense, government, and government agencies worldwide.

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