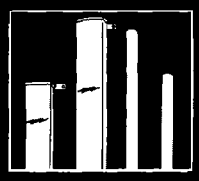
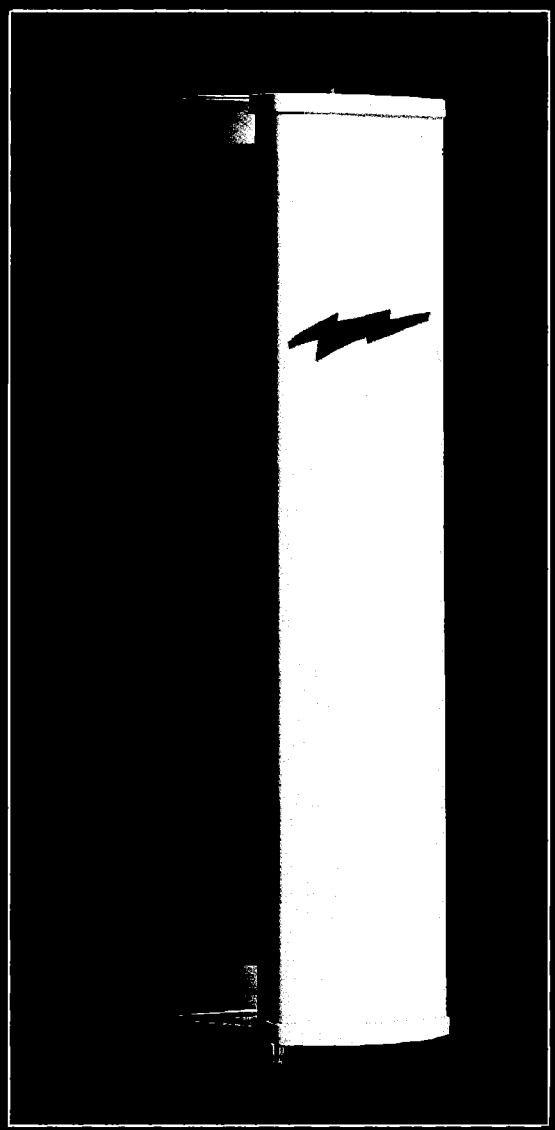


Base Station Antennas



PCS/PCN Panel Antennas

Based on new technology, the performance of PCS 1800/1900 Panel Antennas enhance revenues in modern PCS/PCN applications by decreasing interference and reducing call drop-outs.

Meet your future system requirements more economically. By installing high performance Andrew antennas during initial system deployment, you will not have to upgrade your antennas to counter the added interference as traffic increases and cell sizes are reduced.

PCS/PCN Panel Antennas are designed with an aesthetically pleasing appearance, low weight and low wind loading. With broadband frequency ranges, they are well suited for transmit or receive applications.

Key Performance Advantages of Andrew PCS1800/1900 Panel Antennas Include:

High Performance Options:

- *Extensive null-fill, to eliminate gaps in coverage*
- *Reduced VSWR*
- *Upper side-lobe suppression for improved C/I*

Electrical downtilt option:

- *More accurate antenna footprint. Decreased co-channel and multipath interference*
- *Improved network quality*

Superior main-lobe/side difference:

- *Better carrier signal to interference ratio (C/I)*
- *Reduces number of call drop-outs*

Mechanical Features:

- *Low weight and low wind load for ease of installation*
- *Seamless radomes with closed-cell foam filling for long term reliability*
- *Slim profile for aesthetic acceptability*

Mount Options:

- *Vertical mount provides ± 45° azimuth adjustment when wall mounted*
- *Tilt Mounts provide preset downtilt steps and azimuth adjustment for pipe or wall mounting*

PCS/PCN Panel Antennas Characteristics

Electrical Characteristics – PCS1800

Frequency Range:	1710 - 1880 MHz	
Impedance:	50 ohms	
Return Loss (VSWR):	>15.6 dB (<1.4)	
Polarization:	Vertical	
Azimuth Beamwidths:	3 dB at 60°/65° and 90°	
Front-to-Back Ratio:	>25 dB (>20 dB for 9 dBd model)	
Elevation Upper Sidelobes:	HP Models (H)	<18 dB
Power:	Continuous	>250 W
	Peak	>4 kW

Enviromental Characteristics

Survival Wind Speed:	56 m/s (200 km/h) 125 mph
Temperature:	- 30° to 55°C
Humidity:	Up to 100%
Lightning Protection:	DC ground

Electrical Characteristics – PCS1900

Frequency Range:	1850 - 1990 MHz	
Impedance:	50 ohms	
Return Loss (VSWR):	>15.6 dB (<1.4)	
Polarization:	Vertical	
Azimuth Beamwidths:	3 dB at 90°	
Front-to-Back Ratio:	>25 dB (>20 dB for 10 dBd model)	
Elevation Upper Sidelobes:	HP Models (H)	<18 dB
Power:	Continuous	>250 W
	Peak	>4 kW

Mechanical Characteristics

Wind load at 45 m/s (160 km/h) 100 mph (16% turbulence):
Front = 187N (42 lbf) per meter of antenna height
Side = 37N (8 lbf) per meter of antenna height

PCS1800 Product Range - 60/65°

Model Number	Az Beamwidth degrees	Nominal Gain dBd	Downtilt degrees	El Beamwidth degrees	Weight lb (kg)	Length in (mm)	Width in (mm)	Depth in (mm)
PCS18*-06309-xyz	60/65	9	0	42	1.7 (0.8)	9.8 (250)	6.3 (160)	2.2 (55)
PCS18*-06312-xyz	60/65	12	0	21	2.9 (1.3)	19.2 (490)	6.3 (160)	2.2 (55)
PCS18*-06313-xyz	60/65	13	0	14	4.0 (1.8)	28.7 (730)	6.3 (160)	2.2 (55)
PCS18*-06314-xyz	60/65	14	0	10	5.3 (2.4)	38.2 (970)	6.3 (160)	2.2 (55)
PCS18*-06316-xyz	60/65	16	0	7	7.6 (3.5)	57.1 (1450)	6.3 (160)	2.2 (55)

PCS1900 Product Range - 60/65°

Model Number	Az Beamwidth degrees	Nominal Gain dBd (dBi)	Downtilt** degrees	El Beamwidth degrees	Weight lb (kg)	Length in (mm)	Width in (mm)	Depth in (mm)
PCS19*A-06312-0DG	63	11.5 (13.7)	0	20.5	2.9 (1.3)	19 (490)	6.3 (160)	2.2 (55)
PCS19*A-06313-0DG	63	13.1 (15.3)	0	14.4	5.4 (2.5)	28.7 (730)	6.3 (160)	2.2 (55)
PCS19*A-06315-0DG	63	14.9 (17.1)	0	10.2	8.5 (3.9)	38.2 (970)	6.3 (160)	2.2 (55)
PCS19*A-06316-0DG	63	16 (18.2)	0	6.5	10 (4.5)	57.1 (1450)	6.3 (160)	2.2 (55)

PCS1900 Product Range - 90°

Model Number	Az Beamwidth degrees	Nominal Gain dBd (dBi)	Downtilt** degrees	El Beamwidth degrees	Weight lb (kg)	Length in (mm)	Width in (mm)	Depth in (mm)
PCS19*A-09010-xyz	90	10 (12.2)	0	17.5	3.1 (1.4)	19.3 (490)	6.3 (160)	2.2 (55)
PCS19*A-09012-xyz	90	12.2 (14.2)	0	14.0	4.4 (2.0)	28.7 (730)	6.3 (160)	2.2 (55)
PCS19*A-09013-xyz	90	13 (15.2)	0	9.0	5.5 (2.5)	38.2 (970)	6.3 (160)	2.2 (55)
PCS19*A-09014-xyz	90	14 (16.2)	0	6.0	8.4 (3.8)	57 (1450)	6.3 (160)	2.2 (55)
PCS19*A-09015-xyz	90	15 (17.2)	0	5.6	8.5 (3.9)	63 (1600)	6.3 (160)	2.2 (55)
PCS19*A-09016-xyz	90	16 (18.2)	0	4.8	10 (4.5)	74 (1880)	6.3 (160)	2.2 (55)

* "S" is for standard, "H" is for high performance
** Other electrical beam tilt models available