

**CITY OF SACRAMENTO  
DEPARTMENT OF PLANNING & DEVELOPMENT  
ZONING ADMINISTRATOR  
1231 I Street, Sacramento, CA 95814**

**ACTION OF THE ZONING ADMINISTRATOR**

On Tuesday June 15, 1993 the Zoning Administrator approved with conditions a Zoning Administrator's Special Permit for the project known as Z93-027. Findings of Fact and conditions of approval for the project are listed on pages 2 and 3.

**Project Information**

Request: Zoning Administrator's Special Permit to allow antennas to be attached to an existing 401,800 sq. ft. building on 2.37± developed acres in the Central Business District (C-3) Zone.

Location: 555 Capitol Mall

Assessor's Parcel Number: 006-0145-025

Applicant:	Smart Specialized Mobile Radio (SMR) of California, Inc.	Owner:	Downtown Plaza Towers Association
Address:	3355 Vincent Rd., Suite A Pleasant Hill, CA. 94523	Address:	555 Capitol Mall, Suite 240 Sacto., CA. 95814

General Plan Designation: Regional Commercial & Offices  
Central City Community  
Plan Designation: Urban Office  
Existing Land Use of Site: Office Building  
Existing Zoning of Site: Central Business District (C-3)

**Surrounding Land Use and Zoning:**

North: Commercial; C-3  
South: Commercial; C-3  
East: Commercial; C-3  
West: Commercial; C-3

Property Area: 2.37± acres  
Square Footage of Building: 401,800 sq. ft.  
Height of Building: fourteen stories, 196 ft.  
Exterior Building Materials: concrete  
Roof Materials: tar

Additional Information: Applicant proposes to attach antennas to the parapet wall of the 555 Capitol Mall office building. The antennas are for a dual purpose mobile radio system which would provide an alternative to cellular telephone systems and provide digital dispatch services to large fleet users. The project would be accomplished in two phases. Phase One will consist of the installation of three to six omni antennas on the top of the building (Exhibit C). Phase Two consists of the installation of up to 12 directional panel type antennas (Exhibit D). In addition, a small test antenna and two small global positioning antennas will be installed on the rooftop below the parapet wall. All antennas will be made of non-reflective materials and will not exceed 12 feet above the parapet of the building nor will exceed the height of existing antennas on the rooftop. All radio transmitting/receiving equipment will be located inside the office building.

The Zoning Administrator noted, upon inspection of the site, that there are already several antennas on top of the subject building similar to the type of antenna the applicant is proposing to locate on the building.

The project has been reviewed by Ron Costa of the City's Communications Division.

The project is located in the Central City and is undergoing review by Design Review Board staff. The file number is DR 93-191.

Project Plans: See Exhibits A, B, C and D.

Environmental Determination:

This project will not have a significant effect on the environment and is exempt from environmental review pursuant to State EIR Guidelines (California Environmental Quality Act, Section 15311).

Conditions of Approval

1. The antenna installation may be done in phases as noted above. The proposed antennas will not exceed 12 feet above the parapet in height nor will they exceed the height of the existing antennas on the rooftop.
2. The necessary equipment for the operation of the antennas shall be located within the existing office building.
3. A satellite dish is not being permitted by this permit. If a satellite dish is need in the future, the necessary entitlement shall be obtained.
4. The applicant shall obtain Design Review staff approval and all necessary building permits prior to installation of the antennas.

Findings of Fact

1. The project, as conditioned, is based upon sound principle of land use in that the antennas are compatible with office development in the area.
2. The project, as conditioned, will not be detrimental to the public welfare in that the antennas will be located on top of an existing building where similar antennas are located.
3. The project is consistent with the General Plan which designates the site for Regional Commercial and Office use and the Central City Community Plan which designates the site for Urban Office use.



---

Joy D. Patterson  
Zoning Administrator

A use for which a Special Permit is granted must be established within two years after such permit is approved. If such use is not so established the Special Permit shall be deemed to have expired and shall be null and void. A Special Permit use which requires a Building Permit shall be deemed established when such Building Permit is secured and construction thereunder physically commenced. If no building permit is required, the use shall be deemed established when the activity permitted has been commenced.

The decision of the Zoning Administrator may be appealed to the Planning Commission. An appeal must be filed within 10 days of the Zoning Administrator's hearing. If an appeal is not filed, the action of the Zoning Administrator is final.

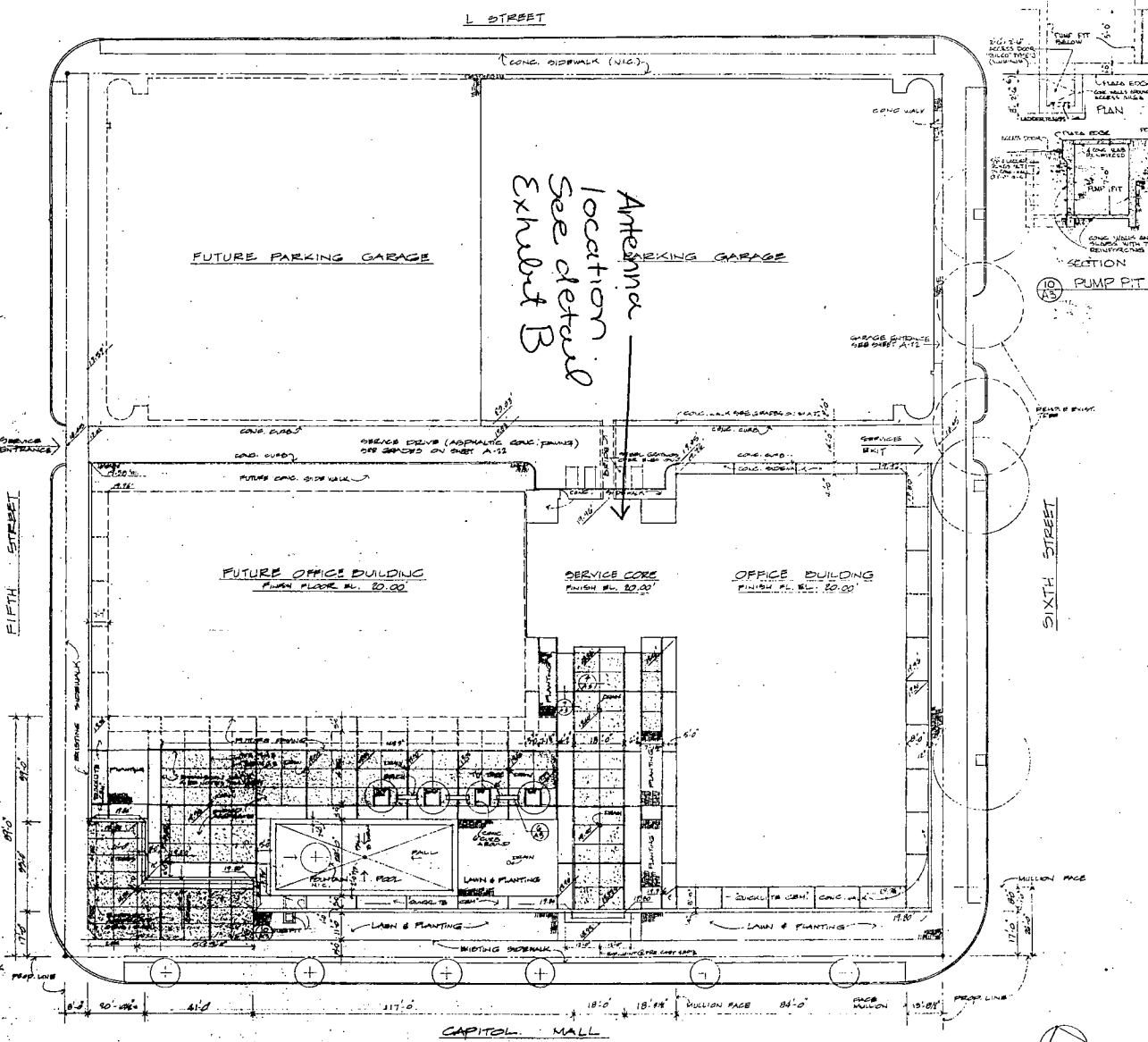
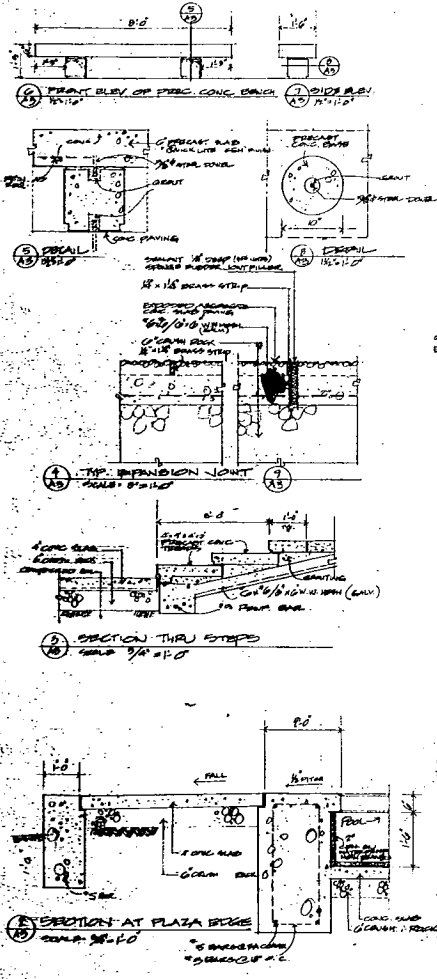
cc: File (original)  
Applicant  
ZA Log Book  
Design Review (Randy Lum)  
Building Division

293-027

6-15-93

#1

- NOTES**
- 1. PROVIDE 1/2" EXPANSION JOINTS AROUND PERIPHERY OF ALL REINFORCED AGGREGATE PAVING AND 40'0" MAX. IN FIELD. ALL OTHER JOINTS ARE 1/2" WIDE IN FIELD.
  - 2. PROVIDE 1/2" EXPANSION JOINTS IN CONG. CURBS. WHEN WORKING SHOW ON PLAN.
  - 3. FURN GRASSES ARE SHOWN ON PLAN PER SURVEY SHEET A-1 FOR EXTERIOR GRASS.
  - 4. REMOVAL ALL CURBS AND ASPHALT PAVING FROM 10'0" REAR GROUND ON PULLEY STREET A-2.
  - 5. ALL LAWN AND PLANTING NOT IN CONTRACT.
  - 6. FOR ALTERNATE OF EXTERIOR AGGREGATE PAVING USE "TERRAZO MAHON" BY AMERICAN TERRAZZO CO., 36 WARD ST., S.F. CALIF.



10 SITE PLAN SCALE = 1/8" = 1'-0"

**OFFICE TOWN PARKING STR.**  
 DOWNTOWN PLAZA RE  
 CAPITOL MALL AVE  
 SACRAMENTO, CALIF.

**McSWEENEY · SCHUPPE**  
 ARCHITECTS A.I.A.  
 MICHAEL D. WELLY ASSOCIATE  
 SAN FRANCISCO, CALIFORNIA

**HARRY J. DEVINE INC.**  
 ARCHITECT  
 SACRAMENTO, CALIFORNIA

**CONRAD ENGINEERS**  
 Division of Conrad Engineers and Architects  
 1200 PINE STREET, FIFTH FLOOR, SACRAMENTO  
 CONRAD ENGINEERS  
 SAN FRANCISCO, CALIFORNIA

NO.			REVISIONS	DATE
1	SITE PLAN DETAILS			6-15-93

SCALE AS SHOWN	JOB NO. 10-114	SHEET NO.
DATE AUG 20 1993	DRAWN	A.S.
CHECKED		

EXHIBIT A

5-26-69

# EXHIBIT B

OFFICE TOWER AND  
PARKING STRUCTURE  
DOWNTOWN PLAZA PROPERTIES  
CAPITOL MALL AVENUE  
SACRAMENTO, CALIFORNIA

McSWEENEY · SCHUPPEL  
ARCHITECTS A.I.A.  
MICHAEL D. KELLY ASSOCIATE  
SAN FRANCISCO CALIFORNIA

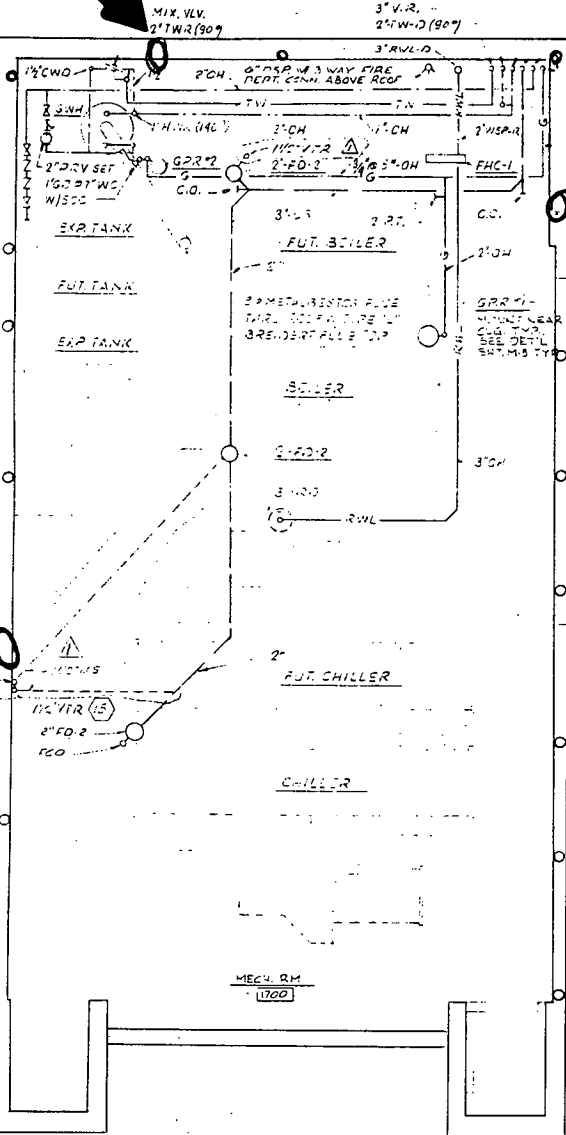
HARRY J. DEVINE INC.  
ARCHITECT  
SACRAMENTO CALIFORNIA

CONRAD ENGINEERS  
Division of Construction Research and Development Corporation  
1484 OXFORD STREET / VAN NUTE, CALIFORNIA  
TELEPHONE 764-0981

Yusufic Engineers Mechanical - Electrical  
1417 23rd Street Sacramento, California 95816

SACRAMENTO APPROVAL DEPT.  
BY SACRAMENTO MAIN - 128

Proposed Antenna



Proposed Antenna

Proposed Antenna

- Existing Antennas
- Proposed Antenna locations

FLOOR PLAN - MECH. ROOM  
SCALE: 1/4" = 1'-0"

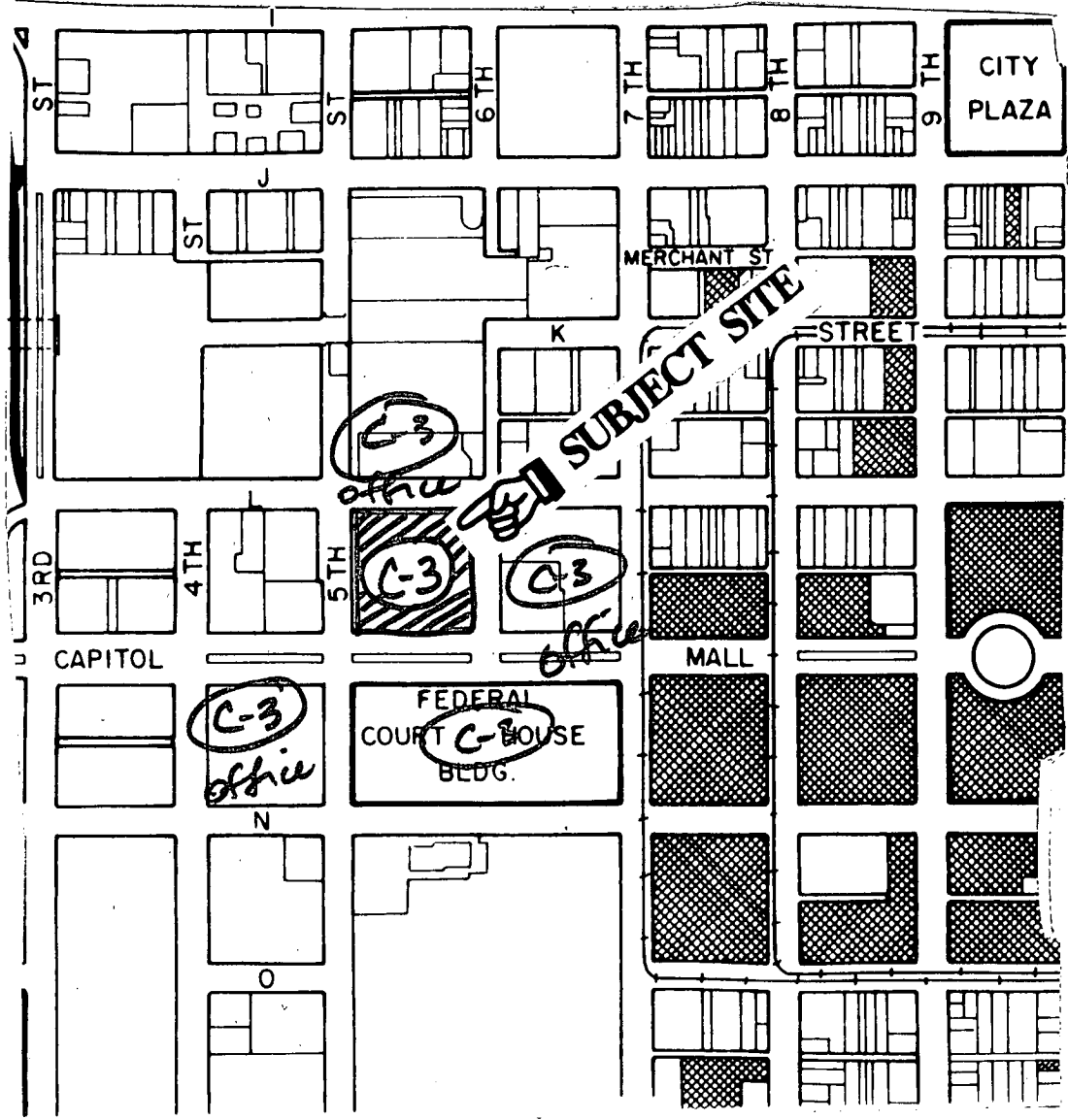
293 - 027

6-15-93

293-027

ADD 2" V.P.A. - TEL. RM. REVISE VENTIS - MECH. RM 3-12-69		
NO.	REVISIONS	DATE
ROOF PLAN - OFFICE & MECH. ROOM		
SCALE: AS NOTED		
JOB NO: 0368	SHEET NO.	
DATE: 5-30-69	M 5	
DRAWN: AM/PE		
CHECKED: D.Y.	OF	SHEETS

#1



**LAND USE, ZONING, AND VICINITY MAP**



**DB810 DUAL SKIRT DIPOLE™ (DSD™) OMNI ANTENNAS**  
**DB810M 10 dBd GAIN, 806-960 MHz**

These antennas are available with or without 3° or 6° of electrical up tilt or downtilt for 806-960 MHz conventional, trunked, paging and cellular operations.

They both offer 10 dBd gain and have similar VSWRs and frequency ranges. The DB810 handles 500 watts input, and the DB810M, which is slimmer and lighter, handles 450 watts.

The main difference between the two antennas lies in the radomes. The ruggedized DB810 is constructed with 3" (76.2 mm) OD Minimum-Tip-Deflection™ fiberglass; the DB810M has a 2" (50.8 mm) OD MTD™ radome made of one-eighth inch (3.18 mm) thick fiberglass. Both are Horizon Blue™ color.

DB810 has a 28" (711 mm) aluminum alloy extension pipe for mounting, the DB810M a 26" (660.4 mm) pipe. Both attach to platforms, towers and structures with round members to 3.5" (88.9 mm) OD or angle, member to 3.75" (92.25 mm). Both use the new No-Torsion DB5087 Mount.

**Design and Construction**

With patented Center-Fed-Collinear™ and Dual Skirt Dipole™ design, these antennas provide broad bandwidths and no pattern tilt across the band.

All metal used in the radiator, feed and matching systems are made of copper or brass, which prevents signal cells.

Each antenna is tested for power rating compliance and the absence of intermodulation generators.

For lightning protection, a large brass tube extends from top to bottom, with provisions for grounding to the tower.

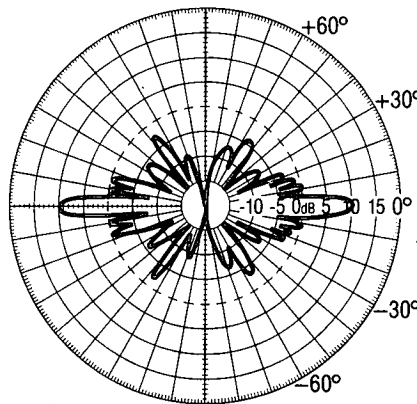
Top and bottom moisture drains are provided.

**Ordering Information**

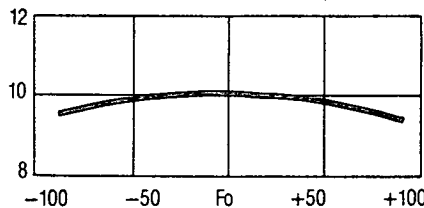
Specify model and frequency range. DB5087 Mount, VAPOR-WRAP® and HELIAX® are included.

VAPOR-WRAP is a registered trademark of Decibel Products.  
 HELIAX is a registered trademark of Andrew Corporation.

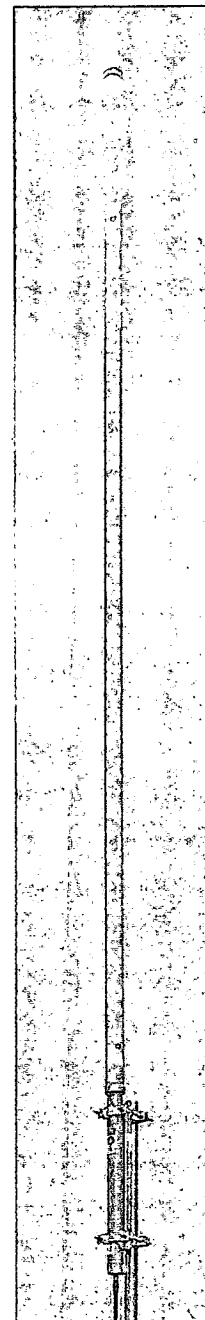
DB810 and DB810M Vertical Pattern



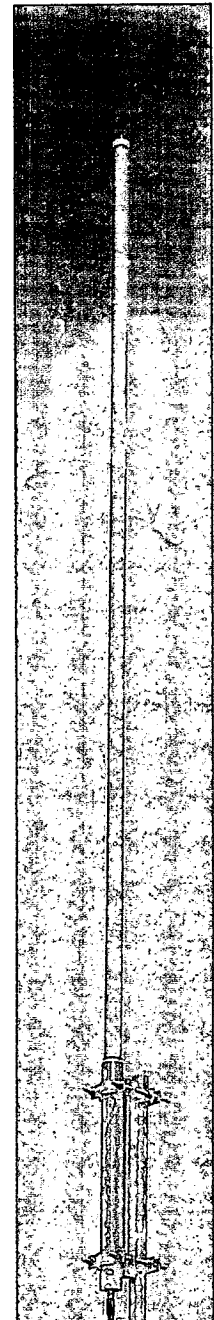
S810 and S810M Gain-dBd vs. Frequency-MHz



Frequency Ranges Available - MHz	
DB810-XT or DB810M-XT	806-869
DB810-XC or DB810M-XC	824-896
S810-X or S810M-X	806-901
DB810-Y or DB810M-Y	890-960
S810-Z or S810M-Z	851-960
For antenna with Flange add "F" Example: DB810MF-XC. Not available on S models.	
For Pressurized antenna add "P" Example: DB810MP-XC. Not available on S models.	
For downtilt add T3 for 3° or T6 for 6°. Example: DB810T6-XC.	
For up tilt add U3 for 3° or U6 for 6°. Example: DB810U6-XC. Not available on S models.	



DB810



DB810M

Electrical Data			
	DB810	DB810M	
Frequency Ranges — MHz	806-960	806-960	
Gain (maximum) — dBd	10	10	
Beamwidth "E" Plane (half power)	6°	6°	
Beamwidth "H" Plane (half power)	Omni	Omni	
Maximum power input — watts	500	450	
Input impedance — ohms	50	50	
VSWR	1.5 to 1 or better	1.5 to 1 or better	
Lightning protection	Direct ground	Direct ground	
Termination	Type N-Female (fixed)	Type N-Female (fixed)	
HELIAX® jumper	N-Male/N-Male	N-Male/N-Male	

Mechanical Data			
	DB810	DB810M	
Materials:			
Radome (fiberglass) — in. (mm)	3 (76.2) OD	2 (50.8) OD	
Clamps (galvanized steel)	DB5087	DB5087	
Maximum exposed area (flat plate equivalent) — ft² (m²)	2 (.19)	1.34 (.125)	
Lateral thrust at 100 mph (161 km/hr) — lbs. (kg)	99 (45)	68 (30.8)	
Length — in. (mm)	158 (4,013)	155 (3,937)	
Tip deflection at 100 mph (161 km/hr) with extension	2.5°	12°	
Net weight — lbs. (kg)	35 (15.88)	30 (13.6)	
Shipping weight — lbs. (kg)	71 (32.2)	45 (20.4)	



## DB870 SERIES OF DIRECTIONAL DB880 PANEL ANTENNAS, 820-960 MHz

Decibel's DB870 and DB880 series of directional panel antennas are designed to operate in the 820-960 MHz range. Horizontal radiation coverage is available for 120°, 105°, 83°, 60° or 45° at the 3 dB points. Some models are available with electrical downtilt.

An optional field adjustable antenna tilt bracket, DB5081, is available to mechanically tilt the major lobe of any model below the horizon.

For information regarding the use of several interconnected panel antennas to generate a near-omnidirectional pattern, contact Decibel System Engineers.

### Design and Construction

Electrically and mechanically these antennas offer the best trade-off between small size vs. windloading and high front-to-back ratio.

**Each antenna is tested for power rating compliance and the absence of intermodulation generators.**

All antennas in the series are constructed using precision high-strength aluminum alloy, brass elements and a high impact, weather and UV resistant fiberglass radome.

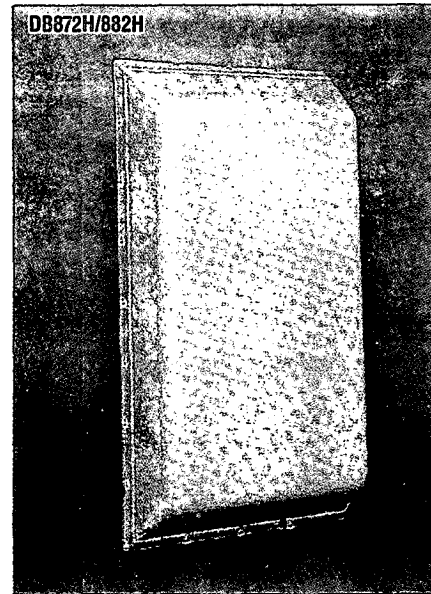
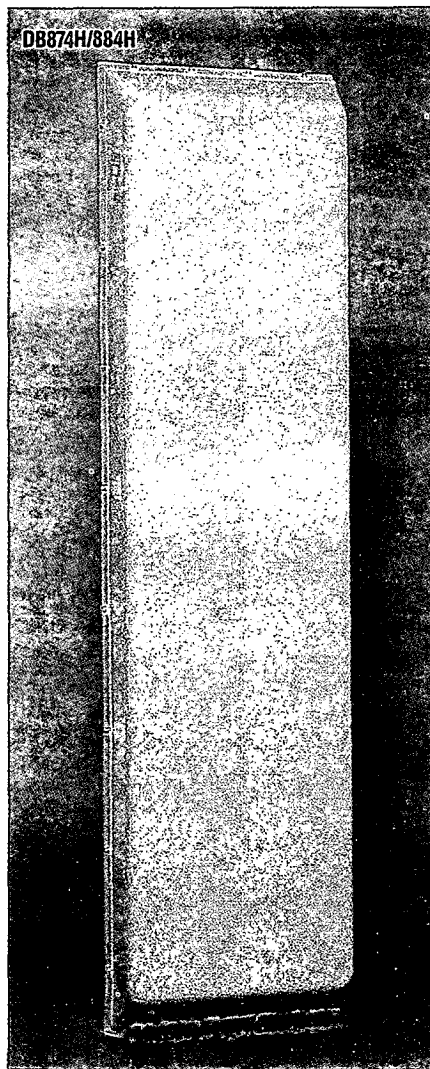
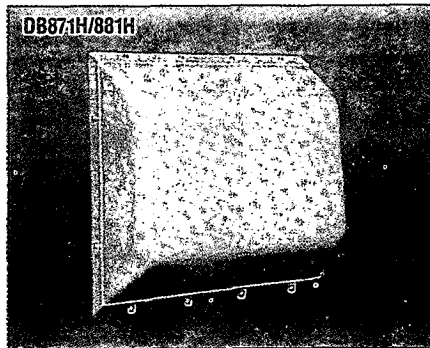
The size of the antennas depends on gain. Low gain DB871 and DB881 are 12"W×12"H×5"D. Medium gain DB872 and DB882 are 12"W×24"H×5"D. High gain DB874 and DB884 are 12"W×48"H×5"D.

### Ordering Information

Determine your desired coverage and refer to the gain table based on horizontal radiation pattern aperture (half power points) and vertical aperture. The table shows the performance of each panel antenna model.

Each model is available by frequency range. Use -X suffix for 820-900 MHz or -Y for 890-960 MHz.

A mounting clamp set is included for direct attachment to 1.5" (38.1 mm) to 3.5" (89 mm) pipes. An AMPS platform pipe mounting kit, DB5080, is optional. VAPOR-WRAP® is included. If a non-pressurized EIA flange or 7/16 DIN connector is required, please specify when ordering.



Gain Table					
Horizontal Aperture	120°	105°	83°	60°	45°
Vertical aperture					
DB871 60° — dBd	5.0	5.5	6.2	8.0	9.2
DB872 29° — dBd	8.0	8.7	9.4	11.0	12.4
DB874 14° — dBd	11.3	11.8	12.5	14.3	15.6

VAPOR-WRAP is a registered trademark of Decibel Products.

Electrical Data	
Frequency Ranges — MHz	-X = 820-900, -Y = 890-960
Gain — dBd	See back page
VSWR	1.5 to 1 or better
Beamwidth "E" Plane (half power)	See back page
Beamwidth "H" Plane (half power)	See back page
Front-to-back ratio — dB	See back page
Maximum power input — watts	
All models except DB871	500
DB871	250

Mechanical Data	
Dimensions (W×H×D) — in. (mm)	See back page
Materials:	
Radome	Fiberglass
Radiating elements	Brass, silver plated
Antenna feed — in. (mm)	.250 (6.3) and .141 (3.6) Copper hardline
Mounting clamps	Galvanized steel
Fasteners	Stainless steel
Maximum exposed area (flate plate equivalent) — ft <sup>2</sup> (m <sup>2</sup> )	See back page
Lateral thrust at 100 mph (161 km/hr) — lbs. (kg)	See back page
Net weight — lbs. (kg)	See back page
Shipping weight — lbs. (kg)	See back page