

EXHIBIT D

Schematic Diagrams of WaveSpan Model WS5800 5.8 GHZ Antennae

Schematic Diagrams

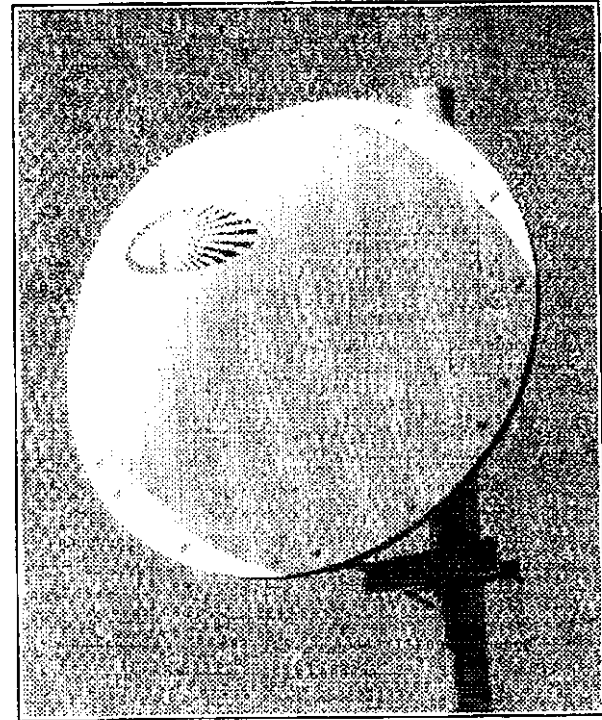


Spread Spectrum / ISM Band Solid Parabolic Antennas 5.690 - 5.925 GHz

Gabriel's New "SS" Series of Spread Spectrum microwave antennas combine competitive electrical characteristics with very affordable pricing. These antenna models are a cost effective alternative while meeting or exceeding Standards EIA/TIA-195-C and EIA/TIA-222-E. Gabriel's parabolic antenna designs carry 54 years of mechanical and electrical design experience.

Gabriel offers a complete line of solid parabolic antenna models in the 5.690 - 5.925 GHz Spread Spectrum (ISM) band. These solid parabolic models are available in 2 ft. (0.6), 4 ft. (1.2), and 6 ft. (1.8) diameters. These 5.690 - 5.925 GHz antenna models employ new state of the art feed designs which terminate with Type "N" connectors.

These "SS" Series models are designed and manufactured to Gabriel's high quality standards and most models offered can be delivered in three days or less. Rapid deployment is one of the major advantages of spread spectrum radio and Gabriel is here to support your short lead time programs with the Gabriel "SS" Series of antennas.



*Gabriel Spread Spectrum 2 ft (0.6 m) Standard
Parabolic Antenna with optional radome*

Gabriel offers a complete line of coaxial cable, cable connectors, and accessories. Call your Gabriel Sales Engineer for more details.

Facts & Features

- Gabriel Quality and Dependability.
- Innovative Feed Designs.
- Type N Female coax connector, 50 ohm
- Most feeds are easily installed from the front of the antenna, while allowing inspection or replacement from rear. Smooth polarization adjustment or change is obtained from the rear of the antenna.
- Gabriel antennas meet or exceed Standards EIA/TIA-195-C and EIA/TIA-222-E.
- Antenna features independent azimuth and elevation adjustments.
- All aluminum backstructure is designed for most advantageous strength and weight combination.
- Gabriel also offers 2.300 - 2.500 GHz Spread Spectrum Grid and Solid Parabolic Antennas and Panel Antennas. Contact your Gabriel Sales Engineer for details.

Electrical Specifications

Frequency GHz	Model Number	Diameter ft. (m)	Standard	Low	Gain at Mid dBi	High	Nominal Mid-Band Beamwidth degrees	XPD dB	F/B ratio dB	VSWR max.	(R.L. dB)
Standard (Solid) Parabolic - Plane Polarized - without radome											
5.690 - 5.925	SSF2-57	2 (0.6)	-	28.3	28.5	28.6	5.9	28	39	1.35	(16.5)
	SSP4-57	4 (1.2)	-	34.2	34.4	34.5	3.0	30	44	1.35	(16.5)
	SSP6-57	6 (1.8)	-	37.6	37.8	37.9	2.0	30	47	1.35	(16.5)

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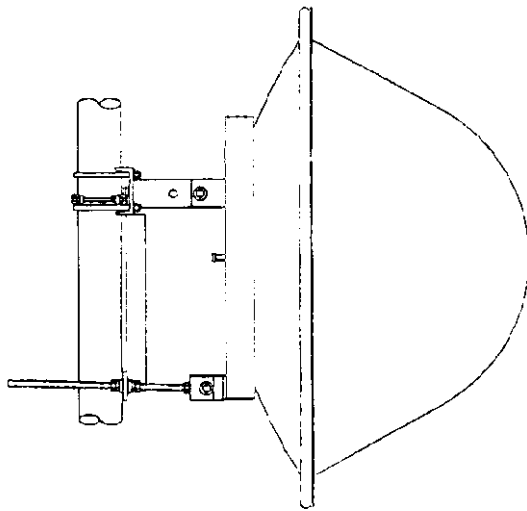
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Spread Spectrum Parabolic Antennas

5.690 - 5.925 GHz



4 ft. (1.2) Standard Parabolic Antenna with optional radome.

Multi-Purpose antenna models available for
Unlicensed (5.690 - 5.925 GHz)
Licensed (5.925 - 6.425 GHz)
see DRFB-59 Series models below.

Facts & Features

- Gabriel Quality and Dependability.
- Flange mates with CPR137G or Type "N" (specify when ordering) (other E A and IEC types available on request).
- CPR flange feeds may be pressurized to 10 psi (70 kPa).
- Most feeds are easily installed from the front of the antenna, while allowing inspection or replacement from rear. Smooth polarization adjustment or change is obtained from the rear of the antenna.
- Feed guy wires are included when necessary.
- Integral formed rim of parabola enhances rigidity, maintaining parabola's integrity.
- All aluminum backstructure is designed for most advantageous strength and weight combination.
- Antenna features independent azimuth and elevation adjustments.
- All Gabriel antennas meet or exceed Standard's EIA-195-C and EIA-222-E.
- DRFB-59 Series operational licensed frequency band 5.925 - 6.425 GHz, ideal for future expansion planning.

Electrical Specifications

Frequency GHz	Model Number	Diameter ft. (m)	Standard	Low	Gain† Mid dB	High	Nominal Mid-Band Beamwidth degrees	XPD dB	F/B ratio dB	VSWR max	(R.L. dB)
Standard - Plane Polarized - (specify termination)											
5.690 - 5.925	RSS2-57BSE	2 (0.6)	1	28.3	28.5	28.6	5.9	28	36	1.15 (23.1)	1.30 (17.7)
	RSS4-57CSE	4 (1.2)	1	34.6	34.8	34.9	3.0	30	42	1.15 (23.1)†	1.30 (17.7)
	RSS6-57CSE	6 (1.8)	1	38.1	38.3	38.4	2.0	30	48	1.15 (23.1)†	1.30 (17.7)
	RSS8-57CSE	8 (2.4)	1	40.5	40.8	40.9	1.5	30	50	1.15 (23.1)†	1.30 (17.7)
	RSS10-57CSE	10 (3.0)	1	42.5	42.7	42.8	1.2	30	53	1.15 (23.1)†	1.30 (17.7)
	RSS12-57BSE	12 (3.7)	1	44.1	44.3	44.4	1.0	30	54	1.15 (23.1)†	1.30 (17.7)
Standard - Dual Polarized - (specify termination)											
5.690 - 5.925	RDSS4-57BSE	4 (1.2)	1	34.5	34.7	34.8	3.0	28	42	1.17 (22.1)†	1.30 (17.7)
	RDSS6-57BSE	6 (1.8)	1	38.0	38.2	38.3	2.1	30	48	1.17 (22.1)†	1.30 (17.7)
	RDSS8-57CSE	8 (2.4)	1	40.4	40.7	40.8	1.5	30	50	1.17 (22.1)†	1.30 (17.7)
	RDSS10-57CSE	10 (3.0)	1	42.4	42.6	42.7	1.2	30	53	1.17 (22.1)†	1.30 (17.7)
	RDSS12-57BSE	12 (3.7)	1	44.0	44.2	44.3	1.0	30	54	1.17 (22.1)†	1.30 (17.7)
Standard - Plane Polarized - Deep Dish - Low VSWR (specify termination)											
5.690 - 5.925	DRFB4-59ASE*	4 (1.2)	1	34.6	34.7	34.9	3.0	28	42	1.25 (19.1)	1.40 (15.5)
5.925 - 6.425	Licensed Freq.		-	34.9	35.3	35.6	2.8	28	43	1.06 (30.7)	1.25 (19.1)
5.690 - 5.925	DRFB6-59CSE**	6 (1.8)	1	38.4	38.6	38.7	1.8	30	50	1.20 (20.8)	1.35 (16.5)
5.925 - 6.425	Licensed Freq.		A	38.7	39.1	39.4	1.7	30	55	1.05 (32.3)	1.20 (20.8)
5.690 - 5.925	DRFB8-59CSE	8 (2.4)	1	40.6	40.8	40.9	1.6	30	50	1.20 (20.8)	1.35 (16.5)
5.925 - 6.425	Licensed Freq.		A	40.9	41.3	41.6	1.4	30	56	1.04 (34.1)	1.20 (20.8)
5.690 - 5.925	DRFB10-59CSE	10 (3.0)	1	42.5	42.6	42.8	1.3	30	53	1.20 (20.8)	1.35 (16.5)
5.925 - 6.425	Licensed Freq.		A	42.8	43.2	43.5	1.1	30	58	1.04 (34.1)	1.20 (20.8)
5.690 - 5.925	DRFB12-59CSE	12 (3.7)	1	44.1	44.2	44.4	1.0	30	54	1.20 (20.8)	1.35 (16.5)
5.925 - 6.425	Licensed Freq.		A	44.4	44.6	45.1	1.0	30	60	1.04 (34.1)	1.20 (20.8)

NOTE: A-Frame mount configurations are available for most models.
 *SE Series models not available in 15 ft. (4.6) diameter.
 Contact your Gabriel Sales Engineer for details.
 † 2 ft. (0.6) and 4 ft. (1.2) antennas are not available in Deep Dish configurations.
 ** Oversized reflector utilized on this product.
 † Meets N.T.I.A. Standards and U.S.F.C.C. Part 15.247.
 † Meets Category A for U.S.F.C.C. Part 101.115 concerning antenna limitations.
 † Improved VSWR models available.
 † Sectionalized antennas available to facilitate export shipments.
 Product information subject to change without notice.

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