

Rhein Tech Laboratories
360 Herndon Parkway
Suite 1400
Herndon, VA 20170
<http://www.rheintech.com>

Client: Tellumat (Pty) Ltd.
FCC: Part 15.247
Industry Canada: RSS-210
FCC ID: ONJ-3ECJ68A4D
Model Name: ORION 5825-SR

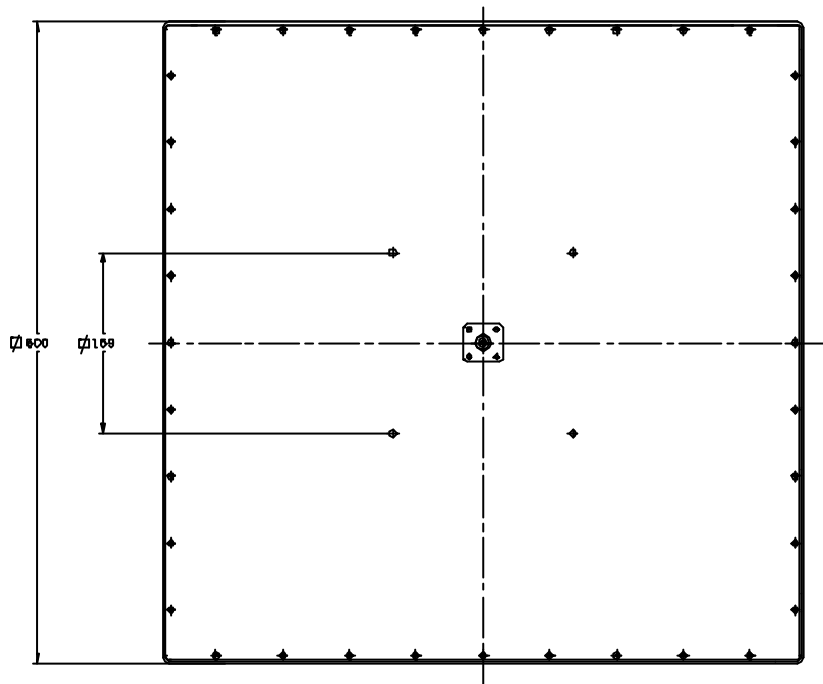
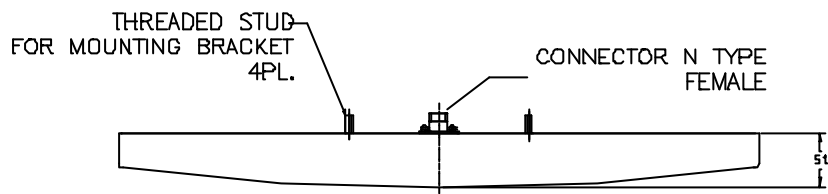
APPENDIX B: ANTENNA SPECIFICATIONS

Please refer to the following pages.

5.8 GHz Directional Antenna

MTI part No.	MT-20004
Type	Planar Array
Regulatory Compliance	ETSI EN 300 833 V1.3.1 (2001-03) ETS 300 019 part 1-4
Electrical	
Frequency Range	5.725 5.85 GHz
Gain	28 dBi (min)
VSWR	1.7:1 (max)
3 dB BW	4.5 (typ)
Polarization	Linear (Vertical or Horizontal)
Cross Polarization	-28 dB (max)
Sidelobe Level	Range 1, Gain Cat. 1, Class 1
F/B Ratio	-40 dB (max)
Lightning Protection	DC Grounded
Mechanical	
Dimensions (LxWxD)	600 x 600 x 50 mm
Weight	5 kgs
Connector	N-Type Female*
Temperature (operating)	-45C to +70C
Wind Load (Survival)	220 km/hr
Radial Ice Load	25 mm
Mounting Kit	MT-120019 (See Mounting Kit section)

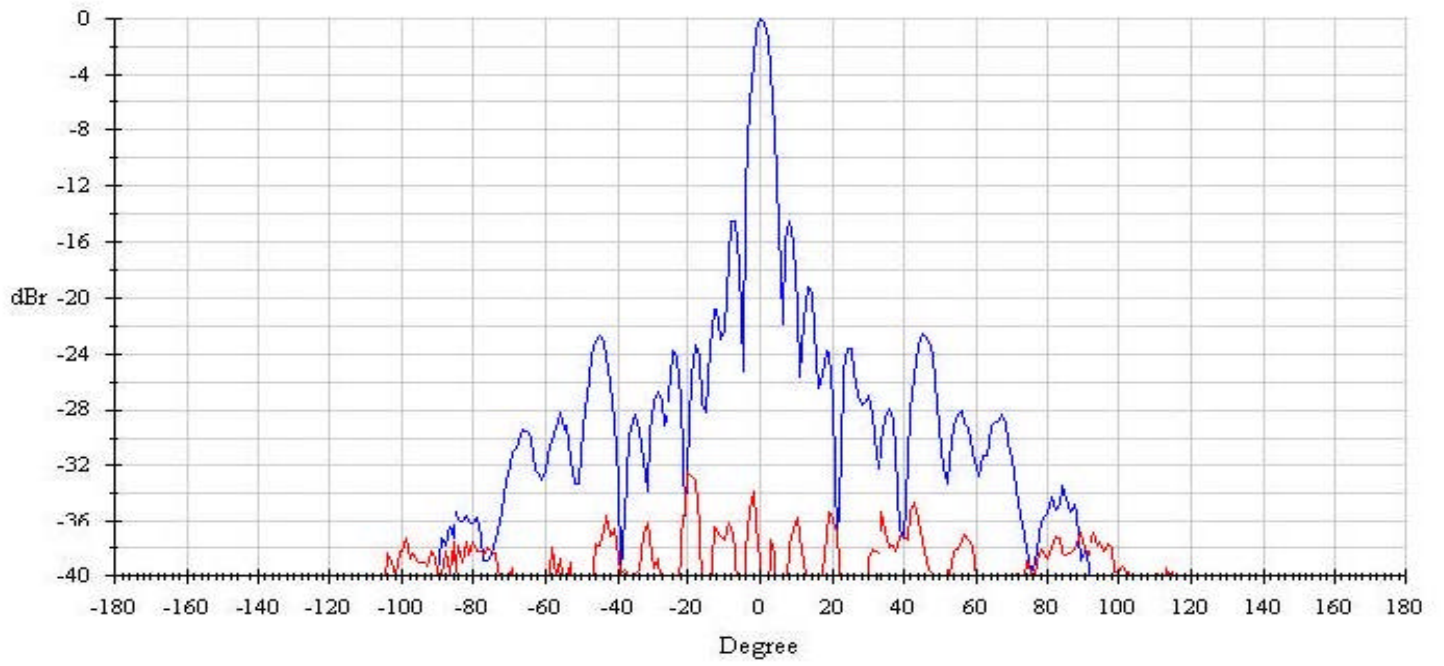
* Also available with SMA connector



MT-20004 →



MT-20004 TYPICAL RADIATION PATTERN



Plane - Dual Polarized and Dual Band Unlicensed "NII" and Spread Spectrum / "ISM" Bands

(National Information Infrastructure) (Industrial, Scientific & Medical)

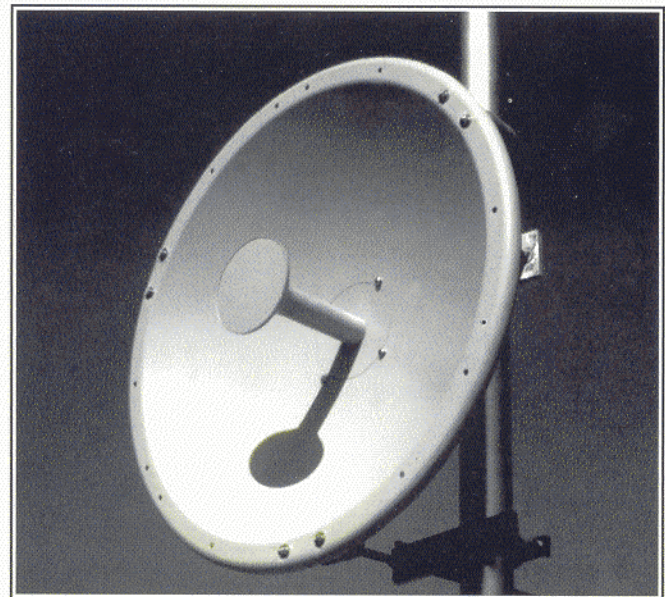
Facts & Features

- Gabriel Quality and Dependability.
- Innovative Feed Design.
- Feed input, Type "N" Female connector. (other types available on request.)
- Isolation is 35 dB on Dual Polarized models.
- Optional radomes available.
- Feeds are easily installed from the rear of the antenna, and allow for inspection or replacement from the rear. Smooth polarization adjustment is also obtained from the rear of the antenna.
- All aluminum backstructure is designed for most advantageous strength and weight combination.
- New environmentally pleasing neutral colors.
- Dual band models are available.

See the Special Application section of this catalog for Gabriel's Directional Flat Panel antennas for Spread Spectrum operation.

Electrical Specifications

Frequency GHz	Model Number	Size 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 - Plane Polarized - without radome											
5.250 - 5.850	SSP2-52B	2 (0.6)	-	28.1	28.5	29.0	6.1	25	38	1.50	(14.0)†
	SSP4-52A	4 (1.2)	-	33.6	34.2	34.6	3.1	30	46	1.50	(14.0)†
	SSP6-52A	6 (1.8)	-	37.0	37.5	38.0	2.1	30	49	1.50	(14.0)†
Standard - Dual Polarized - without radome											
5.250 - 5.850	SSD2-52	2 (0.6)	-	28.0	28.4	28.9	6.1	30	38	1.50	(14.0)†
	SSD4-52	4 (1.2)	-	33.5	34.1	34.5	3.1	30	46	1.50	(14.0)†
	SSD6-52	6 (1.8)	-	36.9	37.4	37.9	2.1	30	49	1.50	(14.0)†



Gabriel "NII" and "ISM" Band
2-ft. (0.6 m) - Plane Polarized - Standard Parabolic Antenna

Associated Equipment Information	Pages
Point-to-Point Antenna Specifications	14 - 111
Special Application Antennas	135 - 145
Antenna Mounts & Reference Dimensions	112 - 134
Radomes	122 - 124
Tower Accessories	146 - 154
Transmission Lines	155 - 243
Dry Air Pressurizers	244 - 253

NOTE:

- † Improved VSWR available.
Product information subject to change without notice.