

Input In Green Rows Only	Units		Space Receivers
Link Description	Reimbursable? N/Y	PSD	PSU
Manufacturer / Model Number	text	Innoflight SCR 104	
Center Frequency	MHz	SCR-104 S-Band	S-Band
Freq From	MHz	2255.237819	NA
Freq To	MHz	2259.762181	NA
Frequency Tolerance	Percent	0.0005	NA
TX Power	W	1.78	NA
TX Power	dBW	2.50	NA
Connector Loss	dB	9.65	NA
Power At Antenna Terminal	dBW	-7.15	NA
Power At Antenna Terminal	W	0.19	NA
Antenna Gain	dB	6.11	6.11
Antenna Beam Width	Degrees	136.00	136.00
Antenna Polarization	text	RHCP	RHCP
Radiation Pattern Diagram File Name	text	00001047-001-00_44240_SN26_Pattern_RevB.pdf	00001047-001-00_44240_SN26_Pattern_RevB.pdf
EIRP	W	0.79	See Gnd Sta
EIRP	dBW	-1.04	See Gnd Sta
bitrate (data)	bps	2,500,000	See Gnd Sta
encoding ratio (Convolutional or Turbo Codes)	number	0.431	See Gnd Sta
bitrate (encoded)	bps	5,800,464	See Gnd Sta
Modulation	text	OQPSK	See Gnd Sta
Multiplier bitrate to bandwidth for identified modulation; 2 for BPSK, 1 for QPSK, 0.667 for 8PSK or Not Used	number	0.78	See Gnd Sta
Bandwidth (Enter directly if multiplier above is Not Used)	Hz	4,524,362	See Gnd Sta
Bandwidth	kHz	4,524.36	See Gnd Sta
Bandwidth	dBHz	66.56	See Gnd Sta
Emission Designator	text	4M52G1D	See Gnd Sta
Power Spectral Density 4kHz Min Bandwidth	dBW per 4 KHz	-31.58	See Gnd Sta
C/N Objective must be between -20 and +30	dB	11.19	See Gnd Sta
Receive System Noise Temp	Degrees K	See Gnd Sta	2381.21
FEC Type	text	Convolutional Code with Reed Solomon	See Gnd Sta
FEC Rate or None	number	1/2, 223/255	See Gnd Sta
Beacon Mode	Yes/No	No	N/A
Number of Contacts Per Day	Total Passes for Satellite	20	
Average Duration of One Contact	Minutes	5.741	

Input In Green Rows Only	Units	S-Band Ground Receivers											
Link Description	text	PSU	PSU	PSU	PSU	PSU	PSU	PSD	PSD	PSD	PSD	PSD	PSD
Station Name	text	Dundee, Scotland	Awarua, NZ	Dubai, UAE	Harmon, Guam	Ojebyn, Sweden	Mingenew, Australia	Dundee, Scotland	Awarua, NZ	Dubai, UAE	Harmon, Guam	Ojebyn, Sweden	Mingenew, Australia
Manufacturer / Model Number	text	ATLAS	ATLAS	ATLAS	ATLAS	ATLAS	ATLAS	NA	NA	NA	NA	NA	NA
Center Frequency	MHz	2037.5	2037.5	2037.5	2037.5	2037.5	2037.5	NA	NA	NA	NA	NA	NA
Freq From	MHz	2035.25	2035.25	2035.25	2035.25	2035.25	2035.25	NA	NA	NA	NA	NA	NA
Freq To	MHz	2039.75	2039.75	2039.75	2039.75	2039.75	2039.75	NA	NA	NA	NA	NA	NA
Frequency Tolerance	Percent	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	NA	NA	NA	NA	NA	NA
TX Power	W	15.14	22.91	28.84	50.12	20.89	69.18	NA	NA	NA	NA	NA	NA
TX Power	dBW	11.80	13.60	14.60	17.00	13.20	18.40	NA	NA	NA	NA	NA	NA
Connector Loss	dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power At Antenna Terminal	dBW	11.80	13.60	14.60	17.00	13.20	18.40	NA	NA	NA	NA	NA	NA
Power At Antenna Terminal	W	15.14	22.91	28.84	50.12	20.89	69.18	NA	NA	NA	NA	NA	NA
Antenna Gain	dBi	36.20	35.40	35.40	35.40	41.00	36.60	36.20	35.41	35.40	35.40	42.00	36.60
Antenna Beam Width	Degrees	2.60	2.60	2.52	2.80	1.43	2.07	2.60	2.60	2.52	2.80	1.30	2.07
Antenna Polarization	text	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
Radiation Pattern Diagram File Name	text	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern	Develop from generic parabolic pattern
EIRP	W	63097.35	79433.95	99998.51	173781.04	263027.29	316227.32	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
EIRP	dBW	48.00	49.00	50.00	52.40	54.20	55.00	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Bitrate (data)	bps	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
encoding ratio (Convolutional or Turbo Codes)	number	1	1	1	1	1	1	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Bitrate (encoded)	bps	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Modulation	text	BPSK	BPSK	BPSK	BPSK	BPSK	BPSK	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Multiplier bitrate to bandwidth for identified modulation; 2 for BPSK, 1 for QPSK, 0.667 for BPSK or Not Used	number	2	2	2	2	2	2	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Bandwidth	Hz	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Bandwidth	kHz	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Bandwidth	dBHz	66.53	66.53	66.53	66.53	66.53	66.53	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Emission Designator	text	4M50G1D	4M50G1D	4M50G1D	4M50G1D	4M50G1D	4M50G1D	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Power Spectral Density 4kHz Min Bandwidth	dBW per 4 KHz	-18.71	-16.91	-15.91	-13.51	-17.31	-12.11	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
C/N Objective must be between -20 and +30	dB	11.97	12.96	13.89	16.14	19.21	18.96	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta
Receive System Noise Temp must be between 30 and 500	Degrees K	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	See Space Sta	210.00	143.00	162.00	77.00	251.00	134.00
Dish G/T	dB/K							13.60	13.70	12.80	13.60	18.00	14.00
Dish Diameter	meters	3.70	3.70	3.70	3.70	7.30	5.00	3.70	3.70	3.70	3.70	7.30	5.00
Wavelength λ	meters	0.147	0.147	0.147	0.147	0.147	0.147						
Log10 Dish Efficiency		-0.1742	-0.2542	-0.2542	-0.2542	-0.2845	-0.3958						
Dish Efficiency	Percent	67%	56%	56%	56%	52%	40%						
Min Elevation Angle	degrees	10	10	10	10	10	10	10	10	10	10	10	10
FEC Type (CC-Convolutional, TC - Turbo Codes) or None	text	None	None	None	None	None	None	NA	NA	NA	NA	NA	NA
FEC Rate or None	number	None	None	None	None	None	None	NA	NA	NA	NA	NA	NA
Latitude	DDMMSS N or S	56° 23' 60" N	46° 31' 12" S	24° 56' 24" N	13° 30' 36" N	65° 20' 13.2" N	29° 0' 36" S	56° 23' 60" N	46° 31' 12" S	24° 56' 24" N	13° 30' 36" N	65° 20' 13.2" N	29° 0' 36" S
Longitude	DDMMSS E or W	3° 10' 12" W	168° 22' 48" E	55° 21' 0" E	144° 49' 12" E	21° 25' 33.96" E	115° 20' 24" E	3° 10' 12" W	168° 22' 48" E	55° 21' 0" E	144° 49' 12" E	21° 25' 33.96" E	115° 20' 24" E
Elevation of Site Above Mean Sea Level	meters	115	13	29	72	12	270	115	13	29	72	12	270
Elevation of Antenna above Grade	meters	1.5	2	25	6.7	5	5	1.5	2	25	6.7	5	5
City	text	Dundee	Awarua	Dubai	Harmon	Ojebyn	Mingenew	Dundee	Awarua	Dubai	Harmon	Ojebyn	Mingenew
Country	text	Scotland	NZ	UAE	Guam	Sweden	Australia	Scotland	NZ	UAE	Guam	Sweden	Australia
Name	text	Dundee, Scotland	Awarua, NZ	Dubai, UAE	Harmon, Guam	Ojebyn, Sweden	Mingenew, Australia	Dundee, Scotland	Awarua, NZ	Dubai, UAE	Harmon, Guam	Ojebyn, Sweden	Mingenew, Australia