477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

Test Report

Product Name: Digital Tramsmission System

FCC ID: ROYTDSS-900B

Applicant: Trinus Systems Inc.

Unitech-Ville 8F 801, #1141-2
Beakseok-Dong, Ilsan-Donggu, Goyang-City
Gyeonggi-Do,410-722
Korea

Date Receipt: 10/30/2006

Date Tested: 11/03/2006

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

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FCC ID: ROYTDSS-900B

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APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

TEST EQUIPMENT LIST

No	Description	Manufacturer	Model No.	Serial No.	Due Cal.
1	Test Receiver	Rohde & Schwarz	ESVS10	830489/001	2007.04.23
2	Test Receiver	Rohde & Schwarz	ESHS 10	825832/014	2007.08.25
3	Test Receiver	Rohde & Schwarz	ESVS 10	826008/014	2006.05.24
4	Spectrum Analyzer	Hewlett Packard	8566B	2311A02394	2007.06.17
5	Spectrum Display	Hewlett Packard	85662A	2542A12429	2007.06.17
6	Quasi-peak Adapter	Hewlett Packard	85650A	2521A00887	2007.06.17
7	RF Preselector	Hewlett Packard	85685A	2648A00504	2007.06.17
8	Preamplifer	Hewlett Packard	8449B	3008A00375	2007.04.23
9	Preamplifer	Hewlett Packard	8447F	3113A05367	2007.05.09
10	Preamplifer	Hewlett Packard	8447F	2805A02570	2005.12.12
11	Preamplifer	A.H. Systems	PAM-0118	164	2007.04.01
12	Biconical Antenna	Eaton Corp.	94455-1	0977	2007.04.01
13	Biconical Antenna	EMCO	3104C	9111-2468	2006.06.07
14	Log Periodic Antenna	EMCO	3146	2051	2007.05.11
15	Log Periodic Antenna	EMCO	3146	8901-2320	2006.03.28
16	Horn Antenna	A.H. Systems	SAS-571	414	2007.03.17
17	Horn Antenna	Horn Antenna A.H. Systems		781	2006.01.07
18	Loop Antenna	Rohde & Schwarz	HFH2-Z2.335.4711.52	826532/006	2007.01.31
19	Dipole Antenna	Rohde & Schwarz	VHAP	574	2007.12.12
20	Dipole Antenna	Rohde & Schwarz	VHAP	575	2007.12.12
21	Dipole Antenna	Rohde & Schwarz	UHAP	546	2007.12.12
22	Dipole Antenna	Rohde & Schwarz	UHAP	547	2007.12.12
23	Signal Generator	Rohde & Schwarz	SMS	872165/100	2006.04.23
24	Signal Generator	Rohde & Schwarz	SMX	825459/030	2007.06.15
25	Spectrum Monitor	Rohde & Schwarz	EZM	862304/007	None
26	Panorama Monitor	Rohde & Schwarz	EPN	883707/207	None
27	Spectrum Analyzer	Advantest Corp.	R3261C	61720208	2007.06.05
28	Speetrum Analyzer	Hewlett Packard	8591A	3205A02641	2007.12.12
29	LISN	EMCO	3825/2	9111-1912	2007.12.12

APPLICANT: Trinus Systems Inc.

THRU Lab & Engineering.
477-6, Hager-Ri, Yoju-Up, Yoju-Gun
Gyeonggi-Do,469-803, Korea
T820318835092F820318835169 email thrukang@kornet.net

2001000000721020010000107 cmu	n tim amang c normetime			
LISN	Solar	8012-50-R-24	8379121	2007.04.25
LISN	Kyoritsu	KNW-242	8-923-2	2007.05.28
Plotter	Hewlett Packard	7475A	2210A02802	None
Modulation Analyzer	Hewlett Packard	8901B	3438A05094	2007.05.19
Waveform Generator	Hewlett Packard	33120A	US34001190	2007.05.23
Audio analyzer	Hewlett Packard	8903B	3011A12915	2007.05.23
Universal counter	Hewlett Packard	5343A	3020A02978	2007.05.23
Frequency Counter	Tektronic	CMC251	TW52489	2007.04.23
Temperature & Humidity Chamber	TABAI EZPEC CORP.	MC711P	112000492	2006.08.27
Antenna Mast	EMCO	1070-3	9109-1617	None
Turn Table	EMCO	1080-1,2	9203-1762	None
Positioning Controller	EMCO	1090	9111-1054	
Antenna Power Supply	Rohde & Schwarz	HZ-9	920127	None
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	881052	None
Coaxial Take-up Reel	EMCO	100817	9109-1684	None
	LISN LISN Plotter Modulation Analyzer Waveform Generator Audio analyzer Universal counter Frequency Counter Temperature & Humidity Chamber Antenna Mast Turn Table Positioning Controller Antenna Power Supply Pulse Limiter	LISN Kyoritsu Plotter Hewlett Packard Modulation Analyzer Hewlett Packard Waveform Generator Hewlett Packard Audio analyzer Hewlett Packard Universal counter Hewlett Packard Frequency Counter Tektronic Temperature & Humidity Chamber TABAI EZPEC CORP. Antenna Mast EMCO Turn Table EMCO Positioning Controller EMCO Antenna Power Supply Rohde & Schwarz Pulse Limiter Rohde & Schwarz	LISN Kyoritsu KNW-242 Plotter Hewlett Packard 7475A Modulation Analyzer Hewlett Packard 8901B Waveform Generator Hewlett Packard 33120A Audio analyzer Hewlett Packard 8903B Universal counter Hewlett Packard 5343A Frequency Counter Tektronic CMC251 Temperature & Humidity Chamber TABAI EZPEC CORP. MC711P Antenna Mast EMCO 1070-3 Turn Table EMCO 1080-1,2 Positioning Controller EMCO 1090 Antenna Power Supply Rohde & Schwarz HZ-9 Pulse Limiter Rohde & Schwarz ESH3-Z2	LISN Solar 8012-50-R-24 8379121 LISN Kyoritsu KNW-242 8-923-2 Plotter Hewlett Packard 7475A 2210A02802 Modulation Analyzer Hewlett Packard 8901B 3438A05094 Waveform Generator Hewlett Packard 33120A US34001190 Audio analyzer Hewlett Packard 8903B 3011A12915 Universal counter Hewlett Packard 5343A 3020A02978 Frequency Counter Tektronic CMC251 TW52489 Temperature & Humidity Chamber TABAI EZPEC CORP. MC711P 112000492 Antenna Mast EMCO 1070-3 9109-1617 Turn Table EMCO 1080-1,2 9203-1762 Positioning Controller EMCO 1090 9111-1054 Antenna Power Supply Rohde & Schwarz HZ-9 920127 Pulse Limiter Rohde & Schwarz ESH3-Z2 881052

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

TEST PROCEDURE

GENERAL: This report shall NOT be reproduced except in full without the written Approval of THRU &ENGINEERING. Shielded interface cables were used in all cases except for cables connecting to the telephone line and the power cords. A test program was run which simulated a normal data transmission on a network.

POWER LINE CONDUCTED INTERPERENCE: The procedure used ANSI STANDARD C63,4-2003 using a 50uH LISN. Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed. The ambient temperature of the UUT was 16 with a humidity of 62.5%.

BANDWIDTH 6.0dB: The measurement were made with the spectrum analyzer's resolution bandwidth (RBW)=100 kHz and the video bandwidth (VBW) =100 kHz and the span set as shown on plot.

POWER OUTPUT: The RF power output was measured at the antenna feed point by removing the permanent antenna and connecting the UUT to a spectrum analyzer, HP Model No.8566B, RBW=3MHz, VBW>or=RBW, span=5MHz.

ANTENNA CONDUCTED EMISSIONS: The RBW=100kHz, VBW > or = RBW and the spectrum was scanned from 30MHz to the 10th Harmonic of the fundamental.

RADIATION INTERFERENCE: The test procedure used was ANSI STANDARD C63.4-2003 using a HEWLETT PACKARD spectrum analyzer with a preselector. The bandwidth (RBW) of the spectrum analyzer was 100kHz up to 1GHz and 1.0MHz above 1 GHz with an appropriate sweep speed. The VBW above 1.0 GHz was = 1.0 MHz. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was with a humidity of 62.5%.

15.247(d) POWER SPECTRAL DENSITY: Starting from the settings that were used for the 6 dB bandwidth the peak signal was located and the span was reduced and the sweep time increased in a manner to maintain calibration and to keep the peak emission in the display, then the sweep time was increased to 670seconds at 2MHz span and a RBW changed to 3kHz. The spectrum analyzer was put into the noise power mode and the plots made.

15.247(e): PROCESSING GAIN, This gain is supplied by the manufacturer of the UUT.

APPLICANT: Trinus Systems Inc.

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2.1033(b) (4)

ANTENNA AND GROUND SYSTEM : The antenna for the base unit is uniquely coupled(reverse coupling) to the intentional radiator.

No ground connection is provided. The only ground in use is the ground plane on the printed circuit board.

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net **APPLICANT:** Trinus Systems Inc.

RULES PART NO.: 15.209,

FCC ID: ROYTDSS-900B

REQUIREMENTS:

FIELD STRENGTH FIELD STRENGTH s15.209

OF Fundamental: 30 - 88 MHz 40 dBuV/m@

NAME OF TEST: RADIATED EMISSIONS (Below 1000MHz)

of Harmonics 30 – 88 MILE ... 88- 216MHz 43.5 902-928MHz 2.4-2.4835GHz

216-916MHz 46 ABOVE 960MHz 54dBuV/m 54 dBuV 127.38dBuV/m @3m

TEST DATA: 1CH

No	Emission Frequency (MHz)	Meter Reading dBuV	Ant. Polaritry	Correction Factor dB	Cable Loss dB	Field Strength (dBuv/m)	Margin (dBuv)	Limit (dBuv/m)
1	56.70	4.3	Н	8.8	1.1	14.1	-25.9	40.0
2	58.10	3.5	Н	8.2	1.1	12.8	-27.2	40.0
3	132.70	6.4	V	13.7	2.0	22.0	-21.0	43.0
4	147.80	9.7	V	16.1	2.1	27.9	-15.1	43.0
5	155.00	10.1	H	16.9	2.2	29.1	-13.9	43.0
6	211.20	8.7	V	11.7	2.7	23.1	-19.9	43.0
7	574.40	10.6	H	18.4	5.4	34.4	-11.6	46.0
8	579.20	10.8	V	18.5	5.4	34.7	-11.3	46.0
9	592.00	11.7	H	18.6	5.5	35.8	-10.2	46.0
10	633.60	10.1	H	19.6	5.8	35.5	-10.5	46.0
11	880.00	10.4	V	22.2	7.2	39.8	-6.2	46.0
12	915.20	11.5	V	22.6	7.4	41.4	-4.6	46.0

APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE

RULES PART NO.: 15.207

REQUIREMENTS: QUASI-PEAK AVERAGE

.15 - 0.5 MHz	66-56 dBuV	56-46 dBuV
0.5 - 5.0	56	46
5.0 - 30.	60	50

TEST PROCEDURE: ANSI STANDARD C63.4-2003. The spectrum was scanned from .15 to 30MHz.

THE HIGHEST EMISSION READ FOR LINE 1 was

THE HIGHEST EMISSION READ FOR LINE 2 was.

TEST RESULTS: Both lines were observed with the UUT transmitting. The measurements indicate that the unit DOES appear to meet the FCC requirements for this class of equipment.

PERFORMED BY: K.M CHOI DATE: 2006/11/03

This device was used DC12V and not required AC Power Line Condected test.

"NOT APPLIED"

APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: OCCUPIED BANDWIDTH

RULES PART NO.: 15.247

15.247(a) (2)

6dB bandwidth shall be at least 500 kHz as shown in the accompanying plots. The bandwidth was measured at three places in the band and the narrowest is reported below.

Base 6dB Bandwidth

	BASE								
CHANNEL	MHZ	LIMIT							
1	1.51	6dB bandwidth							
10	1.5	shall be at							
20	1.47	lest 500kHz							

PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

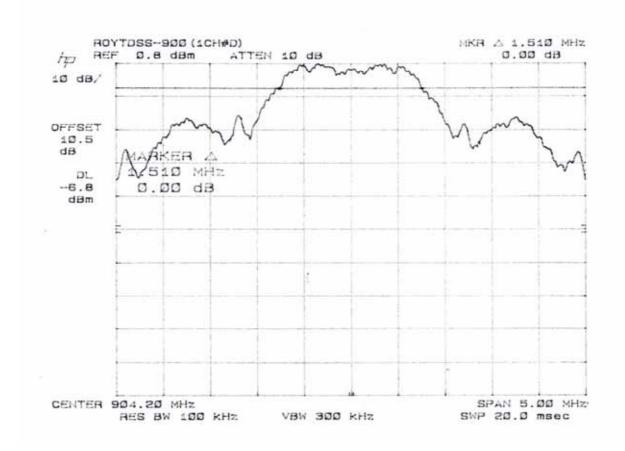
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: OCCUPIED BANDWIDTH (1ch)

RULES PART NO.: 15.247



APPLICANT: Trinus Systems Inc.

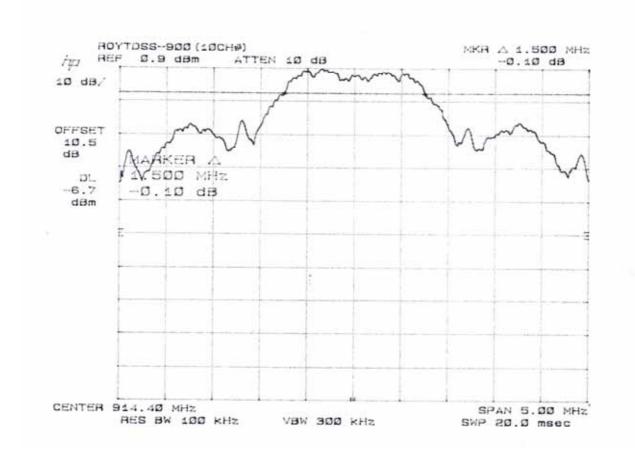
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: OCCUPIED BANDWIDTH (10ch)

RULES PART NO.: 15.247



APPLICANT: Trinus Systems Inc.

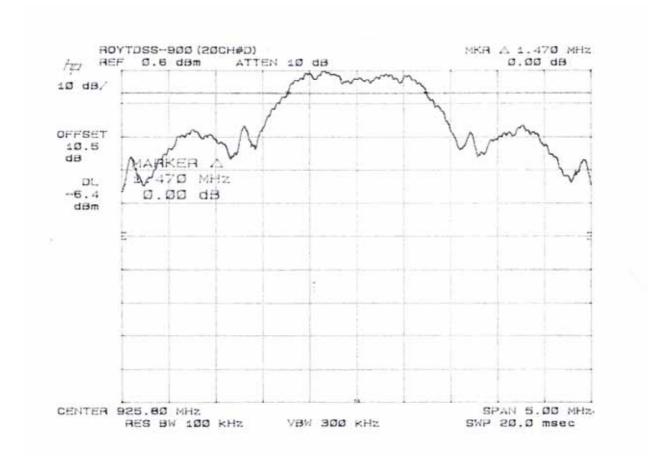
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: OCCUPIED BANDWIDTH (20ch)

RULES PART NO.: 15.247



APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: PEAK POWER OUTPUT

RULES PART NO.: 15.247(b)

The maximum peak output power shall net exceed 1 watt (30dBm). If directional transmitting antennas with a gain of more than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Both the base and handset have a maximum power output of less than +30 dBm. Power was measured by disconnecting the antennas and measuring across a 50 ohm load as recommended by the manufacturer using a HP spectrum analyzer Model 8566B. The antennas are non-directional and do not exceed 6dBi gain. The power output was measured at three places in the band highest is reported below.

POWER OUTPUT - LIMIT + 30 dBm

BASE										
CHANNEL	dBm	mW	LIMIT							
1	7.7	5.9	902-928MHz							
10	7.5	5.6	1.0 WATT							
20	7.2	5.2	or 30dBm							

PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

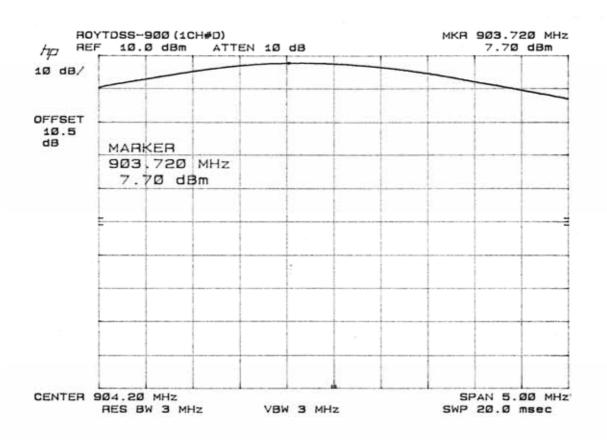
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: PEAK POWER OUTPUT (1ch)

RULES PART NO.: 15.247(b)



APPLICANT: Trinus Systems Inc.

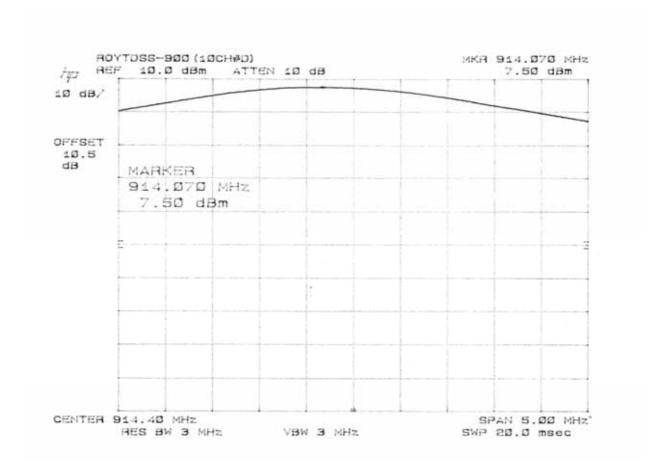
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: PEAK POWER OUTPUT (10ch)

RULES PART NO.: 15.247(b)



APPLICANT: Trinus Systems Inc.

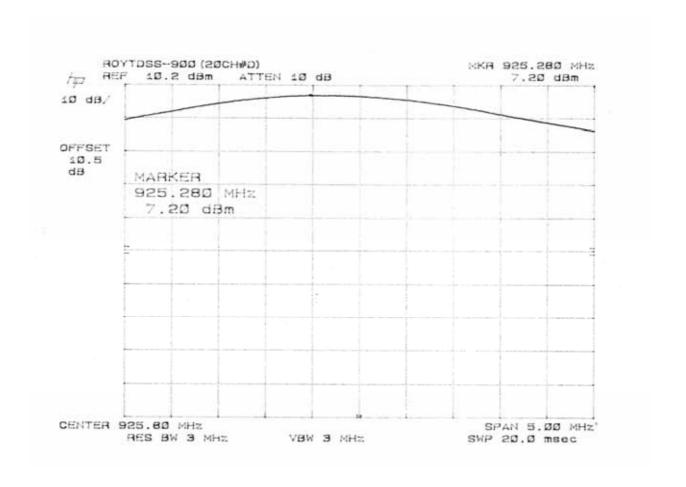
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: PEAK POWER OUTPUT (20ch)

RULES PART NO.: 15.247(b)



APPLICANT: Trinus Systems Inc.

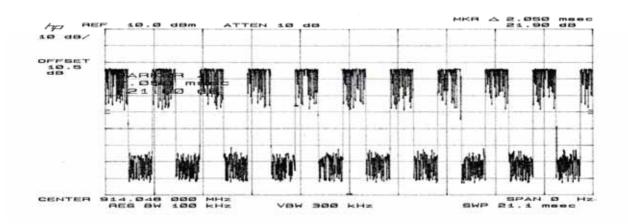
477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

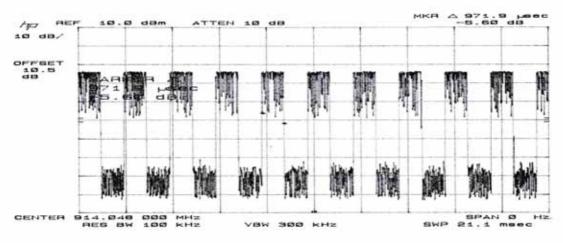
APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: DUTY CYCLE

RULES PART NO.: 15.209, 15.247(c)





Duty cycle value = 20log(Twidth/Tperiod)=20log(1.020*10-3/2.080*10-3)=-6.189

APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: RADIATED SPURIOUS EMISSIONS

RULES PART NO.: 15.209, 15.247(c)

REQUIREMENTS:

FIELD STRENGTH FIELD STRENGTH s15.209

OF Fundamental : of Harmonics 30-88~MHz~40~dBuV/m@

902-928MHz 88- 216MHz 43.5 2.4-2.4835GHz 216-916MHz 46

TEST DATA:

No	Emission Frequency (MHz)	Meter Reading dBuV	Ant. Pola	ANT Factor dB	Cable Loss dB	Duty Cycle dB	Field Strength (dBuv/m)	Margin (dBc)	Limit (dBuv/m)	Detector mode
904.2	904.2	63.2	Н	23.4	7.3		94.6	94.6		PK
904.2	1808.5	24.0	Н	25.7	2.8	6.5	47.1	-6.9	54.0	PK
904.2	2712.7	3.1	Н	28.7	3.5	6.5	30.0	-24.0	54.0	PK
904.2	3617.0	2.9	Н	30.6	3.6	6.5	32.2	-21.8	54.0	PK
904.2	4521.2	1.8	Н	32.8	4.5	6.5	34.5	-19.5	54.0	PK
904.2	5425.5	2.0	Н	33.8	4.9	6.5	36.1	-17.9	54.0	PK
914.4	914.4	61.4	Н	23.3	7.4		92.9	92.9		PK
914.4	1828.8	24.1	Н	25.9	2.9	6.5	47.4	-6.6	54.0	PK
914.4	2743.2	5.0	Н	28.8	3.6	6.5	32.2	-21.8	54.0	PK
914.4	3657.6	4.9	Н	30.8	3.5	6.5	34.4	-19.6	54.0	PK
914.4	4572.0	4.6	Н	32.9	4.5	6.5	37.6	-16.4	54.0	PK
914.4	5486.4	4.1	Н	33.7	4.9	6.5	38.4	-15.6	54.0	PK
925.8	925.8	54.3	Н	23.2	7.4		85.6	85.6		PK
925.8	1851.6	24.8	Н	26.1	2.9	6.5	48.5	-5.5	54.0	PK
925.8	2777.4	5.2	Н	29.0	3.6	6.5	32.9	-21.1	54.0	PK
925.8	3703.2	3.7	Н	31.0	3.5	6.5	33.4	-20.6	54.0	PK
925.8	4629.0	2.8	Н	33.1	4.6	6.5	36.2	-17.8	54.0	PK
925.8	5554.8	1.0	Н	33.8	4.9	6.5	36.2	-17.8	54.0	PK

APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: RADIATED SPURIOUS EMISSIONS INTO ADJACENT RESTRICTED BAND

RULES PART NO.: 15.209, 15.247(c)

REQUIREMENTS:

FIELD STRENGTH FIELD STRENGTH s15.209

OF Fundamental: of Harmonics 30 – 88 MHz 40 dBuV/m@

902-928MHz 88- 216MHz 43.5 2.4-2.4835GHz 216-916MHz 46

Emissions that fall in the restricted bands(15.205) must be less than or equal to 500uV/m (54 dBuV/m).

	PK(*) exceed 54dBuv/m and retested AV Mode (RBW=1MHZ,VBW=10Hz)												
No Frequency (MHz) Meter Reading dBuV Ant. Pola Ant. Pola Buv Ant. Pola													
904.2	1808.5	24.0	Н	25.7	2.8	6.5	46.1	-7.9	54.0	AV			
914.4 1828.8 24.1 H 25.9 2.9 6.5 46.4 -7.6 54.0 A										AV			
925.8	1851.6	24.8	Н	26.1	2.9	6.5	47.3	-6.7	54.0	AV			

SAMPLE CALCULATION: FSdBuV/m = MR(dBuV) + ACFdB + COAX + C.F.

METHOD OF MEASUREMENT: The procedure used was ANSI STANDARD C63.4-2003. When an emission was found, the table was rotated to produce the maximum signal strength. The antenna was placed in both the horizontal and vertical planes and the worse case emissions were reported. The spectrum was scanned from 30MHz to 10GHz using a Hewlett Packard Model 85686 Spectrum Analyzer, Hewlett Packard Model 85685A Preselector, Hewlett Packard Model 85650A Quasi-peak Adaptor, and an appropriate antenna. Low loss coax was used above 1 GHz. Measurements were made at ThruLab & ENGINEERING. located at 477-6, Hager-Ri, Yoju-Up, Yoju-Gun, Kyunggi-Do,469-803, Korea

 \boldsymbol{TEST} $\boldsymbol{RESULTS}$: The unit DOES meet the FCC requirements.

PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: RADIATED SPURIOUS EMISSIONS

RULES PART NO.: 15.209, 15.247(c)

REQUIREMENTS:

FIELD STRENGTH FIELD STRENGTH s15.209

OF Fundamental : of Harmonics 30 - 88 MHz + 40 dBuV/m@

902-928MHz 88- 216MHz 43.5 2.4-2.4835GHz 216-916MHz 46

127.38dBuV/m @3m 54 dBuV ABOVE 960MHz 54dBuV/m

TEST DATA:

No	Emission Frequency (MHz)	Meter Reading dBuV	Ant. Pola	ANT Factor dB	Cable Loss dB	Duty Cycle dB	Field Strength (dBuv/m)	Margin (dBc)	Limit (dBuv/m)	Detector mode
904.2	904.2	69.7	V	23.4	7.3		101.1	101.1		PK
904.2	1808.5	29.5	V	25.7	2.8	6.5	52.6	-1.4	54.0	PK(*)
904.2	2712.7	5.0	V	28.7	3.5	6.5	31.9	-22.1	54.0	PK
904.2	3617.0	4.9	V	30.6	3.6	6.5	34.2	-19.8	54.0	PK
904.2	4521.2	4.2	V	32.8	4.5	6.5	36.9	-17.1	54.0	PK
904.2	5425.5	3.9	V	33.8	4.9	6.5	38.0	-16.0	54.0	PK
914.4	914.4	68.2	V	23.3	7.4		99.7	99.7		PK
914.4	1828.8	29.7	V	25.9	2.9	6.5	53.0	-1.0	54.0	PK(*)
914.4	2743.2	6.5	V	28.8	3.6	6.5	33.7	-20.3	54.0	PK
914.4	3657.6	5.9	V	30.8	3.5	6.5	35.4	-18.6	54.0	PK
914.4	4572.0	4.8	V	32.9	4.5	6.5	37.8	-16.2	54.0	PK
914.4	5486.4	3.2	V	33.7	4.9	6.5	37.5	-16.5	54.0	PK
925.8	925.8	66.8	V	23.2	7.4		98.1	98.1		PK
925.8	1851.6	29.4	V	26.1	2.9	6.5	53.1	-0.9	54.0	PK(*)
925.8	2777.4	5.8	V	29.0	3.6	6.5	33.5	-20.5	54.0	PK
925.8	3703.2	5.6	V	31.0	3.5	6.5	35.3	-18.7	54.0	PK
925.8	4629.0	4.9	V	33.1	4.6	6.5	38.3	-15.7	54.0	PK
925.8	5554.8	4.0	V	33.8	4.9	6.5	39.2	-14.8	54.0	PK

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: RADIATED SPURIOUS EMISSIONS INTO ADJACENT RESTRICTED BAND

RULES PART NO.: 15.209, 15.247(c)

REQUIREMENTS:

FIELD STRENGTH FIELD STRENGTH s15.209

OF Fundamental : of Harmonics 30 – 88 MHz 40 dBuV/m@

902-928MHz 88- 216MHz 43.5 2.4-2.4835GHz 216-916MHz 46

127.38dBuV/m @3m 54 dBuV ABOVE 960MHz 54dBuV/m

Emissions that fall in the restricted bands(15.205) must be less than or equal to 500uV/m (54 dBuV/m).

No	Emission Frequency (MHz)	Meter Reading dBuV	Ant. Pola	ANT Factor dB	Cable Loss dB	Duty Cycle dB	Field Strength (dBuv/m)	Margin (dBuv)	Limit (dBuv/m)	Detector mode
904.2	1808.5	24.2	V	25.7	2.8	6.5	46.3	-7.7	54.0	AV
914.4	1828.8	25.7	V	25.9	2.9	6.5	48.0	-6.0	54.0	AV
925.8	1851.6	24.9	V	26.1	2.9	6.5	47.4	-6.6	54.0	AV

SAMPLE CALCULATION: FSdBuV/m = MR(dBuV) + ACFdB + COAX + C.F.

METHOD OF MEASUREMENT: The procedure used was ANSI STANDARD C63.4-2003. When an emission was found, the table was rotated to produce the maximum signal strength. The antenna was placed in both the horizontal and vertical planes and the worse case emissions were reported. The spectrum was scanned from 30MHz to 10GHz using a Hewlett Packard Model 85686 Spectrum Analyzer, Hewlett Packard Model 85685A Preselector, Hewlett Packard Model 85650A Quasi-peak Adaptor, and an appropriate antenna. Low loss coax was used above 1 GHz. Measurements were made at ThruLab & ENGINEERING. located at 477-6, Hager-Ri, Yoju-Up, Yoju-Gun, Kyunggi-Do,469-803, Korea

TEST RESULTS: The unit DOES meet the FCC requirements.

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

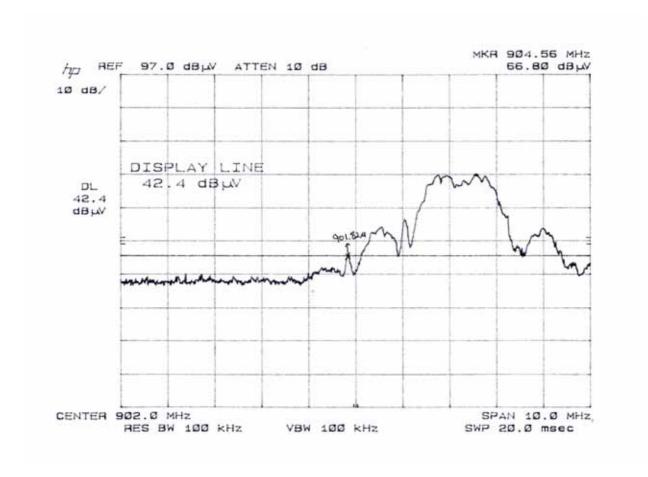
NAME OF TEST: BAND EDGES MEASURMENT

RULES PART NO.: 15.209, 15.247(c)

TEST PROCEDURE: An in band field strength measurement of the fundamental emission using the RBW and

detector function required by C63.4-2003 and FCC Rules. The procedure was repeated with an peak detector and a plot made. The calculated field strength in the adjacent restricted band is

presented below.



PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

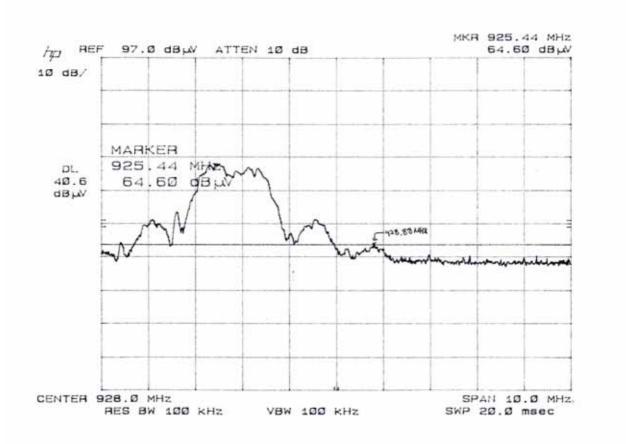
NAME OF TEST: BAND EDGES MEASURMENT

RULES PART NO.: 15.209, 15.247(c)

TEST PROCEDURE: An in band field strength measurement of the fundamental emission using the RBW and

detector function required by C63.4-2003 and FCC Rules. The procedure was repeated with an peak detector and a plot made. The calculated field strength in the adjacent restricted band is

presented below.



PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

477-6, Hager-Ri, Yoju-Up, Yoju-Gun Gyeonggi-Do,469-803, Korea T820318835092F820318835169 email thrukang@kornet.net

APPLICANT: ISV Co.,LTD.

FCC ID: ROYTDSS-900B

NAME OF TEST: POWER SPECTRAL DENSITY

RULES PART NO.: 15.247(d)

REQUIREMENTS: The power spectral density averaged over any 1-second interval shall not be greater than 8 dBm

in any 3KHz bandwidth within these bands.

TEST DATA:

BASE		
CHANNEL	dBm	LIMIT
1	-8.8	Less Then 8 dBm
10	-8.7	
20	-8.8	

Measurement Method;

Starting from the settings that were used for the 6 dB bandwidth the peak signal was located and the span was reduced and the sweep time increased in a manner to maintain calibration and to keep the peak emission in the display, then the sweep time was increased to 670seconds at 2MHz span and a RBW changed to 3KHz. The spectrum analyzer was put into the noise power mode and the plots made.

PERFORMED BY: K.M CHOI DATE: 2006/11/03

APPLICANT: Trinus Systems Inc.

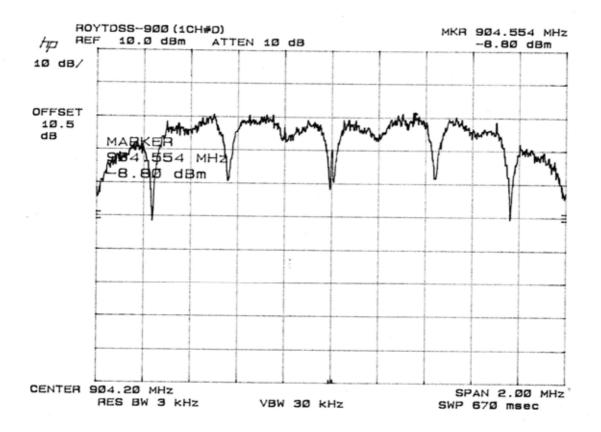
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: POWER SPECTRAL DENSITY (1ch)

RULES PART NO.: 15.247(d)



APPLICANT: Trinus Systems Inc.

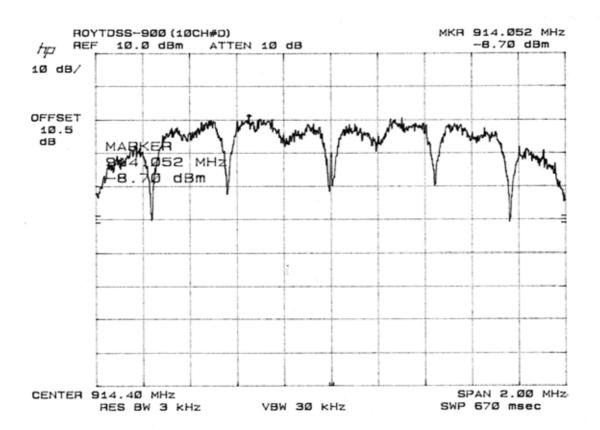
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: POWER SPECTRAL DENSITY (10ch)

RULES PART NO.: 15.247(d)



APPLICANT: Trinus Systems Inc.

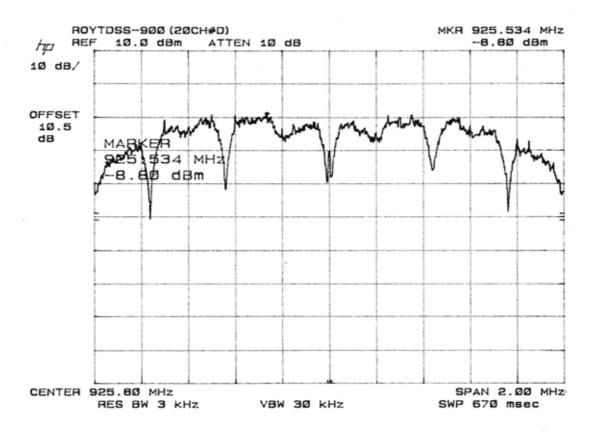
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APPLICANT: Trinus Systems Inc.

FCC ID: ROYTDSS-900B

NAME OF TEST: POWER SPECTRAL DENSITY (20ch)

RULES PART NO.: 15.247(d)



APPLICANT: Trinus Systems Inc.