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Class II Permissive Change Report

APPLICANT	TELTRONIC, S.A.U.				
	POLIGONO MALPICA CALLE F				
	PARCELA 12 ZARAGOZA 50057 SPAIN				
FCC ID	WT7PTRUNK25RF760				
IC CERTIFICATION	8624A-PT25760				
MODEL NUMBER	RF UNIT 764-806 MHz				
PRODUCT DESCRIPTION	RF UNIT 764-806 MHZ				
DATE SAMPLE RECEIVED	7/28/2010				
DATE TESTED	August 15, 2010				
TESTED BY	Nam Nguyen				
APPROVED BY	Mario de Aranzeta				
TIMCO REPORT NO.	T\TELTRONIC				
	S.A.U\1092AT10\1092AT10TestReport.doc				
TEST RESULTS	⊠ PASS ☐ FAIL				

THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.





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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

The test results relate only to the items tested.

Summary

This Class II permissive change report covers:

- 1. The addition of a low power of 0.6 Watts which is adjustable in 2 dB steps to the power listed in the grant.
 - 2. A change in emission designator.

Neither change is a result of changes to in any way to the hardware of the transceiver.

The device under test does:

fulfill the general approval requirements as identified in this test report not fulfill the general approval requirements as identified in this test report

Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc. 849 NW State Road 45 Newberry, Fl 32669

Authorized Signatory Name:



Mario de Aranzeta C.E.T. Compliance Engineer/ Lab. Supervisor

Date: August 20th, 2010

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GENERAL INFORMATION DUT Specification

DUT Description	RF UNIT 764-806 MHZ			
FCC ID	WT7PTRUNK25RF760			
IC Certification	8624A-PT25760			
Model Number	RF UNIT 764-806 MHZ			
Serial Number	N/A			
DUT Power Source	☐ 110-120Vac/50- 60Hz			
	☐ DC Power 12V			
	☐ Battery Operated Exclusively			
Test Item	☐ Prototype			
	☐ Pre-Production			
	☐ Production			
Type of Equipment	Fixed			
	Mobile			
	☐ Portable			
Test Conditions	The temperature was 26°C with a relative humidity of 50%.			
Modification to the DUT	None			
Test Exercise	The DUT was placed in continuous transmit mode.			
Applicable Standards	ANSI/TIA 603-C:2004, FCC CFR 47 Part 90, IC RSS-119, RSS-GEN			
Test Facility Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA.				

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TEST PROCEDURES

Power Line Conducted Interference: The procedure used was ANSI/TIA 603-C:2004 using a 50uH LISN. Both lines were observed with the DUT transmitting. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

Bandwidth 20 dB: The measurements were made with the spectrum analyzer's resolution bandwidth (RBW) = 1 MHz and the video bandwidth (VBW) = 3 MHz and the span set as shown on plot.

Power Output: The RF power output was measured at the antenna feed point using a peak power meter.

Antenna Conducted Emissions: The RBW = 100 kHz, VBW = 300 kHz and the span set to 10.0 MHz and the spectrum was scanned from 30 MHz to the 10^{th} harmonic of the fundamental. Above 1 GHz the resolution bandwidth was 1 MHz and the VBW = 3 MHz and the span to 50 MHz.

Radiation Interference: The test procedure used was ANSI/TIA 603-C:2004 using an Agilent spectrum receiver with pre-selector. The bandwidth (RBW) of the spectrum receiver was 100 kHz up to 1 GHz and 1 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1 GHz was 3 MHz. The analyzer was calibrated in dB above a micro volt at the output of the antenna.

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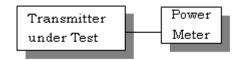
RF POWER OUTPUT

Rule Part No.: FCC Part 2.1046(a), IC RSS-119 4.1 and 5.4, RSS-GEN 4.8

Test Requirements:

Method of Measurement: RF power is measured by connecting a 50-ohm, resistive wattmeter to the RF output connector. With a nominal battery voltage, and the transmitter properly adjusted the RF output measures:

Test Setup Diagram:



Test Data:

OUTPUT POWER:

LOW - 0.6Watts

The power output is adjustable from 0.6 Watts to the power listed on the grant.

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MODULATION CHARACTERISTICS

This permissive change deletes 11K0F1D and adds 8K1F1E and 8K1F1D.

No change in hardware or software was necessary for this change.

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SPURIOUS EMISSIONS AT ANTENNA TERMINALS (CONDUCTED)

Rule Part No.: FCC Part 2.1051(a), RSS-GEN 7.1.4

Requirements: For 25 kHz spacing: 43+10 log(Po)

For 12.5 kHz spacing: 50+10log(Po)

Method of Measurement: The carrier was modulated 100% using a 2500 Hz tone. The spectrum was scanned from 0.4 to at least the 10th harmonic of the fundamental. The measurements were made in accordance with standard ANSI/TIA 603-C:2004.

Test Data:

Emission MHz	dBc	
764.00	0	
1528.00	69.4	
2292.00	72.4	
3056.00	70.5	
3820.00	70.3	
4584.00	71.3	
5348.00	67.9	
6112.00	68.0	
6876.00	65.7	
7640.00	68.6	

Emission MHz	dBc	
770.00	0	
1540.00	69.8	
2310.00	71.5	
3080.00	68.9	
3850.00	69.2	
4620.00	70.8	
5390.00	68.8	
6160.00	67.0	
6930.00	64.8	
7700.00	69.1	

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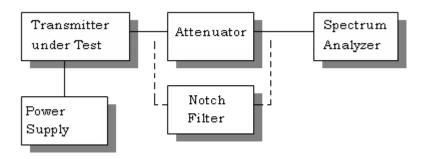


Emission MHz	dBc	
776.00	0	
1552.00	70.6	
2328.00	71.5	
3104.00	70.4	
3880.00	70.7	
4656.00	69.6	
5432.00	67.5	
6208.00	67.1	
6984.00	67.7	
7760.00	68.2	

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Method of Measuring Conducted Spurious Emissions



METHOD OF MEASUREMENT: The procedure used was ANSI/TIA 603-C:2004. The measurements were made at TIMCO ENGINEERING INC. 849 N.W. State Road 45, Newberry, Florida 32669.

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EMC EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3-Meter Semi- Anechoic Chamber	Panashield	N/A	N/A	Listed 2010	2012
Analyzer Tan Tower Quasi-Peak Adapter	НР	85650A	3303A01690	CAL 11/22/09	11/22/11
Analyzer Tan Tower RF Preselector	HP	85685A	3221A01400	CAL 11/21/09	11/21/11
Analyzer Tan Tower Spectrum Analyzer	НР	8566B Opt 462	3138A07786 3144A20661	CAL 11/24/09	11/24/11
Analyzer Tan Tower Preamplifier	НР	8449B-H02	3008A00372	CAL 11/21/09	11/21/11
Coaxial Cable #64	Semflex Inc.	60637	Timco #64	CHAR 3/30/09	3/30/11
Antenna: Dipole Kit	Electro-Metrics	TDA-30/1- 4	152	CAL 3/3/09	3/3/12
Antenna: Dipole Kit	Electro-Metrics	TDA-30/1- 4	153	CHAR 4/5/09	4/5/12
Hygro- Thermometer	Extech	445703	0602	CAL 1/30/09	1/30/11
Modulation Analyzer	HP	8901A	3435A06868	CAL 5/9/09	5/9/11
Digital Multimeter	Fluke	FLUKE-77- 3	79510405	CAL 5/14/09	5/14/11
Temperature Chamber	Tenney Engineering	TTRC	11717-7	CHAR 4/25/08	4/25/10
Antenna: Passive Loop	EMC Test Systems	EMCO 6512	9706-1211	CAL. 6/1/09	6/2/11

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