

Electromagnetic Compatibility Report

Contract Placed by: Excelsys Technologies Ltd
27 Eastgate Drive
Eastgate Business Park
Little Island
Cork
Ireland

Order No: 918057

EQUIPMENT TESTED

Manufacturer	Description	Part No.	Product Rev.
Excelsys Technologies Ltd	XF Model AC/DC Power Supply	XFC444444S00	07F

TEST SPECIFICATIONS

Title	Test Clauses
Mil Std 461F Ship Above Decks CVF EMC Control Plan Digital VLA,	CE102, RE102
MIL-STD-1399, SECTION 300A, Shipboard Electric Power, EN 61000-4-2	VTHD Single Harmonic Currents

EMC TEST REPORT

Equipment: Excelsys Technologies Ltd
XF Model 1 kW configurable AC/DC Power Supply

Part No XFC444444S00

Report Author: Mr L Brien **Checked By:** Mr P Reilly
Signature: **Signature:**
Senior EMC Engineer EMC Manager

This report contains 47
pages including this cover
sheet.

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EMC TEST REPORT No. 12E4138-2

Date Equipment Delivered
for EMC Testing : 15th August 2012

Date of Tests : 16th August to 26th September 2012

Test Location : Compliance Engineering Ireland Ltd., Dunshaughlin, Co. Meath

EUT Condition : Good

CEI EMC Engineer : Mr L Brien

1 INTRODUCTION

EMC tests were performed on an Excelsys AC/DC power supply unit to assess its Electromagnetic Compatibility characteristics in general accordance with selected tests from Mil Std 461F, Mil Std 1399 Section 300 Type 1

The EUT was an XF Model 1 kW configurable power supply. The XF Model consisted of one XFC Powerpac module and 6 x XG4 PowerMod modules

The EUT was tested with and without an external filter circuit supplied by Excelsys for selected tests and as specified in the relevant test section in this report.

The EUT was arranged according to figure 2 Mil Std 461F for radiated and conducted testing in a semi-anechoically lined chamber and powered from a 115 V 400Hz.

The EUT testing for Mil Std 1399 Section 300 Type 1 was powered by 115V 60 Hz and 400Hz depending on the selected test and as specified in the relevant test section.

Photographs of the test layouts are shown towards rear of report.

All EMC test equipment used is regularly calibrated and the calibrations are traceable to National and International Standards. Compliance Engineering Ireland Ltd is an INAB accredited testing laboratory No. 088T. CEI is accredited for emissions and immunity testing to commercial standards only and not those specially contained in this report.

This report applies only to the equipment tested. The major items of test equipment used are listed in Appendix A.

2 SUMMARY OF RESULTS

The EUT was tested to the following specification test clauses:

- 1 MIL-STD 461F, RE102, RF Radiated Emissions Electric Field, Navy Mobile and Army Limits (10 kHz to 18 GHz)
- 2 MIL-STD 461F, CE102, Conducted Emissions, Power leads, Mains Basic Curve + 6dB and DC Basic Curve (10 kHz to 10 MHz)
- 3 MIL-STD-1399, SECT. 300A, Electric Power. Harmonics