



### TEST REPORT

Report Number: 3182564MIN-001  
Project Number: 3182564

Testing performed on the  
TPOC

To  
RTCA/DO-160F:2007  
Section 21  
Radiated Emissions for Category M Equipment

For  
Invacare Corporation

Test Performed by:  
Intertek Testing Services NA, Inc.  
7250 Hudson Blvd., Suite 100  
Oakdale, MN 55128

Test Authorized by:  
Invacare Corporation  
One Invacare Way, PO Box 4028  
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Date: July 7, 2009

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Date: July 7, 2009

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## 1.0 DESCRIPTION OF THE SAMPLE (EUT)

<b>Model:</b>	TPOC
<b>Type of EUT:</b>	Portable Oxygen Concentrator
<b>Serial Number:</b>	Unit # 1
<b>Company:</b>	Invacare Corporation
<b>Customer:</b>	Mr. David Polacsek
<b>Address:</b>	One Invacare Way, PO Box 4028 Elyria, OH 44036
<b>Phone:</b>	440-329-6147
<b>Fax:</b>	440-326-3911
<b>Test Standards:</b>	<input type="checkbox"/> EN 55022:2006 +A1:2007, Class <input type="checkbox"/> EN 55011:2007, Group , Class <input type="checkbox"/> 47 CFR, Part 15:2008, §15.107 and §15.109, Class <input type="checkbox"/> EN 55014-1:2006 <input type="checkbox"/> EN 61326-1:2006 <input type="checkbox"/> Class for Radiated and Conducted Emissions <input type="checkbox"/> EN 60601-1-2:2001 +A1:2006 <input type="checkbox"/> Class Radiated and Conducted Emissions <input checked="" type="checkbox"/> RTCA/DO-160F:2007, Section 21, Radiated Emissions for Category M Equipment  <input type="checkbox"/> EN 61000-6-3:2007 <input type="checkbox"/> EN 61000-6-4:2007 <input type="checkbox"/> EN 61000-3-2:2006 <input type="checkbox"/> EN 61000-3-3:1995 +A1:2001 +A2:2006 <input type="checkbox"/> Other
<b>Date Sample Submitted:</b>	July 7, 2009
<b>Test Work Started:</b>	July 7, 2009
<b>Test Work Completed:</b>	July 7, 2009
<b>Test Sample Conditions:</b>	<input type="checkbox"/> Damaged <input type="checkbox"/> Poor (Usable) <input checked="" type="checkbox"/> Good <input type="checkbox"/> Prototype <input checked="" type="checkbox"/> Production <input type="checkbox"/> Used

## 2.0 TEST SUMMARY

Referring to the performance criteria and the operating mode during the tests specified in this report, the equipment complies with the requirements according to the following standards.

TEST STANDARD	TEST	RESULT
21.5	Radiated RF Emissions	Pass

### 3.0 EQUIPMENT UNDER TEST

#### 3.1 Power Configuration

<b>Rated voltage:</b>	<input type="checkbox"/> 120VAC <input type="checkbox"/> 230VAC <input type="checkbox"/> 400VAC <input checked="" type="checkbox"/> 16VDC from internal battery <input type="checkbox"/> Other:
<b>Rated current:</b>	_____ Amp.
<b>Rated frequency:</b>	<input type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz
<b>Number of phases:</b>	<input type="checkbox"/> 1 Phase <input type="checkbox"/> 3 Phases

#### 3.2 EUT Configuration

The equipment under test was operated during the measurement under the following conditions:

- Standby
- Continuous Normal Operation (see details below)
- Specific test program
- 

##### Operating modes of the EUT:

No.	Description
1	O2 concentrator is On, continuous O2 flow mode
2	

##### Cables:

No.	Type	Length	Designation	Note
1	N/A			
2				
3				

##### Support equipment/Services:

No.	Item	Description
1	N/A	
2		
3		

**General notes:** None

### 3.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	<u>15-35 ° C</u>
Humidity:	<u>30-60 %</u>
Atmospheric pressure:	<u>86-106 kPa</u>

#### 4.0 TEST CONDITIONS AND RESULTS

##### 4.1 Radiated Emissions

###### Description of the test location

Test location:  OATS  Anechoic Chamber

Test distance:  1 meter  3 meters

Test result: Pass

Frequency range: 100MHz - 6GHz

###### Notes:

1. EUT and measuring equipment setup according to the DO-160F, Section 21 standard.
2. Testing was performed in the Anechoic Chamber.
3. Testing was performed in frequency range 100MHz to 400MHz with RBW 10kHz (Graphs 1 and 2); in frequency range 400MHz to 1GHz with RBW 100kHz (Graphs 3 and 4); and in frequency range 1GHz to 6GHz with RBW 1MHz (Graphs 5 and 6).