

February 11, 2005

Timco Engineering, Inc.  
Telecommunication Certification Body  
849 NW State Road 45  
Newberry, FL 32669

**SUBJECT: ITRONIX CORPORATION  
FCC ID: KBCIX100XA775WLBT  
Parts 24(E) - Certification  
Composite Device (PCT)**

On behalf of Itronix Corporation is an application for Part 24(E) Certification of the IX100X Rugged Handheld PC with internal Dual-Band PCS/Cellular GSM GPRS/EDGE PCMCIA Modem Model: AirCard 775 manufactured by Sierra Wireless, Inc. (FCC ID: N7NAC775, originally granted June 18, 2004), utilizing an external  $\frac{1}{4}$ -wave helix antenna, and a vehicle-mount antenna with vehicle cradle. The IX100X also incorporates an internal co-located 802.11b/Bluetooth combo transmitter Model: WM-BB-AG-01 manufactured by Universal Scientific Industrial Co., Ltd. (FCC ID: IXMWM-BB-AG-01, originally granted March 18, 2004), with an internal 802.11b dipole antenna located at the top front side center above the LCD display, and an internal Bluetooth printed circuit antenna located at the front right side center of the device. Part 15(C) composite certification applications for the 802.11b/Bluetooth combo transmitter are submitted simultaneously within this application. **The Sierra Wireless AirCard 775 GSM GPRS/EDGE Modem and 802.11b WLAN do not transmit simultaneously. The Sierra Wireless AirCard 775 GSM GPRS/EDGE Modem can transmit simultaneously with the Bluetooth. Please refer to the Supplementary EMC test report submitted within this application for the co-located simultaneous transmit measurement data.**

<b>Model:</b>	<b>IX100XA775WLBT</b>
<b>Device Classification:</b>	<b>PCS Licensed Transmitter worn on body (PCT)</b>
<b>Device Description:</b>	<b>Rugged Handheld PC with Sierra Wireless AirCard 775 PCS/Cellular GSM GPRS/EDGE Modem</b>
<b>Co-located Transmitter(s):</b>	<b>USI WM-BB-AG-01 802.11b/Bluetooth Combo Transmitter</b>
<b>Emission Designator(s):</b>	<b>238KGXW, 242KGXW, 240KG7W, 242KG7W</b>
<b>Frequency Tolerance(s):</b>	<b>2.5 PPM (PCS GSM) / 2.5 PPM (Cellular GSM)</b>
<b>Tx Frequency Range(s):</b>	<b>1850.2 - 1909.8 MHz (PCS GSM) 824.2 - 848.8 MHz (Cellular GSM)</b>
<b>Max. Conducted Power Measured:</b>	<b>28.9 dBm Peak (PCS GSM) / 32.1 dBm Peak (Cellular GSM)</b>
<b>Modulation(s) Type Tested:</b>	<b>GMSK</b>
<b>Max. Duty Cycle Tested:</b>	<b>50 % (Source-Based Time-Averaged)</b>
<b>Source-Based Time-Aver. Power:</b>	<b>25.9 dBm Peak Cond. (Max. PCS GSM) / 29.1 dBm Peak Cond. (Max. Cellular GSM)</b>
<b>Max. ERP/EIRP Measured:</b>	<b>1.23 Watts (30.90 dBm) EIRP - PCS GSM (Nearson <math>\frac{1}{4}</math>-Wave Helix Antenna) 1.01 Watts (30.05 dBm) ERP - Cellular GSM (Nearson <math>\frac{1}{4}</math>-Wave Helix Antenna) 0.305 Watts (24.84 dBm) EIRP - PCS GSM (MaxRad Vehicle-Mount Antenna) 0.544 Watts (27.36 dBm) ERP - Cellular GSM (MaxRad Vehicle-Mount Antenna)</b>
<b>Max. SAR Level(s) Measured:</b>	<b>0.414 W/kg - 1g average (PCS GPRS) 1.40 W/kg - 1g average (Cellular GPRS)</b>
<b>Antenna Type(s):</b>	<b>External - Nearson <math>\frac{1}{4}</math>-Wave Helix - Dual-Band GSM (P/N: 47-0180-001) External - MaxRad 3-dBi Gain Vehicle-Mount (P/N: WMLPVDB800/1900) Internal - Dipole - front side top center above LCD display (802.11b) Internal - Printed Circuit - front right side center (Bluetooth)</b>

Submitted within this application is the TCB Form 731, applicant's confidentiality request, FCC Parts 24(E) and 22(H) EMC measurement report data and test setup photographs (Celltech Labs and Sierra Wireless), Co-transmit Supplementary EMC measurement report data and test setup photographs (Celltech Labs), MPE RF exposure evaluation data (Celltech Labs), SAR RF exposure measurement report data and test setup photographs (Celltech Labs), FCC ID label and location, internal and external device photographs, block diagrams (confidential), schematic diagrams (confidential), operational description (confidential), tune-up procedure (confidential), antenna specifications (confidential), and the user manual with RF exposure information.

If you have any questions or comments concerning the above, please contact the undersigned.

Sincerely,



Jonathan Hughes  
General Manager  
Celltech Labs Inc.

cc: Itronix Corporation