

FCC ID: QLBPT11MH

U.S. Technologies, Inc.

FCC Part 15, Class B Certification

Report Number: 07-0186

Issue Date: August 9, 2007

Customer: Pegasus Technologies, Inc.

Model: PT11MH

SECTION 9

RF EXPOSURE INFORMATION

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5.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

The unit under evaluation has one external antenna. Pegasus Technologies, Inc. calculated the MPE emission values for the EUT with this 1.2 dBi antenna. They used the formula shown in OET Bulletin 65 and calculated the minimum distance between antenna and unsuspecting user as 20 cm.

Pegasus Technologies, Inc. will sell the PT11MH with the following antenna.

MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dB	TYPE OR CONNECTOR
Mobile Antennas				
Pegasus Technologies, Inc.	Monopole	¼ Wave	Approximately 1.2 dBi	Reverse Polarity SMA connector

Power Output

The EUT's maximum expected output power as shown in Section 2.7 was

Frequency of Fundamental (MHz)	Measurement (dBm)*	Measurement (mW)*	FCC Limit (Watt)
902.952	27.16	520	1.0
915.020	27.37	546	1.0
926.950	27.06	508	1.0

* Measurement includes 0.1 dB for cable loss

The maximum EIRP expected for mobile installations is with the +1.2 dBi gain Monopole antenna. This would yield a maximum EIRP of 27.37 dBm + 2.0 dBi = +29.57 dBm.

5.1 RF Safety Requirements to 2.1091 for Mobile Transmitters

The maximum EIRP for mobile installations may be expected to be

$$\text{Antilog}(29.57 \text{ dBm}/10) = 905.73 \text{ mW}$$

MPE Calculations

The limits for this unit (uncontrolled exposure) are $1.0 \text{ mW}/\text{cm}^2$. Taking the RF Density Field Equation:

Mobile Installations

$$S = 905.73 / 4 * \pi * 20^2$$

$$S = 905.73 / 5026.55$$

$$S = 0.18 \text{ mW} / \text{cm}^2$$

This is well below the maximum level of $1.0 \text{ mW} / \text{cm}^2$

All manual instructions will specify 20 cm for mobile installations