



HERMON LABORATORIES

January 22, 2004

American TCB
6731 Whittier Ave
Suite C110
McLean, VA 22101
Attn: Mr. T. Johnson, Examining Engineer

RE: your e-mail dated January 20, 2004; Telematics Wireless Ltd.
FCC ID:NTAFP100RA, ATCB001034

Dear Mr. Johnson,
Please find below the answers to your questions.

- 1) The reader does not have an Ethernet connector. By mistake an old block diagram was sent. A revised block diagram (FP100RA_block_diagram_15717_rev1) was uploaded on January 22, 2004.
- 2) The power amplifier is an RF Micro Devices' IC type RF2132. It has a supply voltage of 4.8 V and draws 300 mA at maximum output power of +28 dBm.
- 3) The Tx data modulates an ASK modulator at 70 MHz. The modulator output frequency is filtered by a SAW filter (FL6) with a 3 dB bandwidth of 2.5 MHz and up-converted to 915 MHz by a PLL synthesizer of 845 MHz. Both oscillators are locked to a 16 MHz TCXO with a frequency stability of ± 5 ppm. The Tx frequency is filtered by a 915 MHz SAW filter (FL5) with a 3 dB bandwidth of 10 MHz. The modulation is ASK with an ON to OFF ratio of at least 20 dB. The voltage applied to Q13 together with an RC network at the base of Q13 are used as a spectrum shaper. The receiver frequency is down-converted to a 10 MHz IF by mixing it with a 925 MHz oscillator based on a SAW resonator with a frequency stability of ± 200 KHz.
- 4) The device shall use various antennas with a maximum gain of 14.2 dBi. The power range of the reader is minus 20 dBm to 27 dBm and is software controllable. Only authorized technical personnel, using special calibration software and password, via the maintenance port of the reader may calibrate the output power.
- 5) Retest of unintentional RE and antenna conducted power testas per 15.111 were performed. The revised test report TELRAD_FCC.15717_rev2 was uploaded on January 22, 2004.
- 6) Testing up to 5 GHz was performed. The revised test report TELRAD_FCC.15717_rev2 was uploaded on January 22, 2004.
- 7) The EUT is powered from a battery only.

Sincerely,

Marina Cherniavsky,
certification engineer
Hermon Laboratories