

Operational Description of Indigo FWT-200E

FCC ID: UN3FWT-200E

- **FWT –200E is a type of Fixed Wireless Terminal based on CDMA-2000 1x technology, according to IS-2000 international standard.**
- **Bidirectional RF transceiver is employed in the product for voice, SMS and data communication. Is RF performance is in compliance with IS-98D CDMA standard.**
- **The CDMA2000 1x technology uses the Code Division Multiplexing Access coding scheme, which give best spectrum efficiency while using minimum RF transmission power and emission. It is environmental friendly technology and widely used around the world.**
- **Fixed Wireless Terminal, is the desktop wireless terminal. It uses the same technology as used in mobile phones. It is also called, in general, the Wireless Local Loop (WLL) products. This type of the product is broadly used in rural areas and developing countries, where the wireless line telephone penetration rate is low.**
- **The FWT-200E design with number keys, functional keys, handset, hand-free speaker/Mic, large LCD display, Li+ battery and external charger(AC power). Most of the features and function is very similar to CDMA mobile phones. There is External Omni Antenna, which give the product greater signal reception, and greater RF transmission ability. This increase the coverage of the CDMA base-station while the FWT-200E is used. The battery for the unit is for back-up purpose in order to give user ability to make and receive calls/SMSs while there is power outage.**

- The RF transceiver of the product is based on Super-H architecture, which give the product better performance on side-lobe, out of band emission and minimized LO leakage. Such design is well proven in the wireless industry.
- The LCD is used in the product, for customer to configure the FWT, send/receive SMS, keep the phone books, display Caller ID display/call history, it also provide additional features which is useful to users, such as calendar, stop watch, reminder, game, etc. Such features are very common in mobile phones.
- A Lithium Iron (Li+) battery is used in the product, which has capacity of 1200mAh. It give customer more than 3 hours talk time and 100 hours of standby time.
- The frequency bands can be used are specified by IS-98D (such as Cell-Band/800MHz, PCS-Band/1900MHz, MNT-Band(450MHz), KPCS-Band/1700MHz, etc. This is well defined in the IS-98D standard, which also specified all the RF performance the product in compliance must achieve.
- For IS-98D and IS-2000S, Q-QPSK modulation + CDMA coding scheme is used. This modem design, allows some level of RF saturation, while the performance still in-line with the specification. The variable CDMA coding scheme also gives the wireless terminal the better way to stay in connection with the base-station.