



## **X1TXN 2.4GHz DSSS Module User Manual.**

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### **1. Features**

- 2.4GHz Direct Sequence Spread Spectrum (DSSS) radio transceiver module.
- Operates in the unlicensed worldwide ISM band (2.4 GHz to 2.483.5GHz) band
- Fully integrated power regulation with a wide input unregulated operating range 2.4 to 3.6V.
- Fully integrated local oscillator and 12MHz 20ppm reference crystal
- 20mA operating current
- Transmit power 4.5dBm EIRP (2.5dBm conducted)
- Receive sensitivity up to -95dBm
- DSSS data rates up to 250kbps
- 100 meters operating range
- Full packet assembling and disassembling
- Auto transaction sequencer
- Fully buffered digital interface with high voltage tolerant inputs

### **2. Pin description**

<b>Pin Number</b>	<b>Name</b>	<b>Description</b>
1	GND	Module Ground
2	VDD	Module power input
3	DATA	Serial Data Input

### 3. Specifications

Parameter	Value	Units
Storage Temp	-65 to 105	Degrees Celsius
VDD	2.4 to 3.6	Volts
Receive Sensitivity	-95	dBm
Transmit power (conducted)	2.5	dBm MAX
Transmit power (radiated)	4.5	dBm MAX
Idle current	1	mA
Receive current	22	mA
Transmit current	20	mA

### 4. Module User Requirements

4.1 This module must be integrated into a device where the user cannot access the antenna connector.

4.2 Only a 2dBi antenna can be used with this module. The antenna must meet and not exceed the gain and pattern of the supplied Inpaq DAM00BM11500200 folded dipole antenna.

4.3 The device must contain the following permanent labeling on the exterior of the device as follows:



**Contains FCC ID: BRWDXMTX10**  
**Contains UPN: 6157A-BRWDXMT**

4.4 The user manual of the device must contain the following paragraph:

**This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.**

**Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

**This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400 GHz to 2.4835 GHz frequency range.**

**The following countries associated regulatory agencies recognizing the noted certifications for this product as authorized for sale and use are:**

<b>USA</b>	<b>Canada</b>	<b>Belgium</b>
<b>Denmark</b>	<b>France</b>	<b>Finland</b>
<b>Germany</b>	<b>Italy</b>	<b>Netherlands</b>
<b>Spain</b>	<b>Sweden</b>	<b>UK</b>

4.5 This module meets the requirements for a mobile and portable device.