

GlobalStrap Specifications:

Applications:

This device can be used as an “electronic padlock”. Users can use this tool for real time monitoring of any (hole? Lock with eyelets?) locking mechanism. The device monitors the strap integrity, with detection against tamper and cutting events.

Operating Environment:

- Case is made from a tough Polycarbonate and the inner electronics are environmentally sealed using TPE(Thermoplastic Elastomer), insuring product longevity.
- Operating temperature range is from -40 C to 80 C.
- Expected shelf life is 3 years. Operating lifetime is 1 year.
- Device is asleep, until a strap is inserted, once awake it was join with its associated AMU.

Compatibility:

GlobalStrap can communicate with any of the GlobalTrak Asset Monitoring Units (AMU). Does it make sense just to copy the RSN data sheet for this?

Communications:

- Can communicate with any AMU using a star network configuration.
- The ZigBee protocol is used, operating in the 2.4 GHz range.
- Ember’s EM250 System-on-Chip(SoC), incorporates Ember’s radio transceiver and Cambridge Consultants RISC XAP 16-bit processor all on one chip.
- Tx Power is 5dBm, Rx sensitivity is -95dBm.

Mechanical:

- 2.14” X 3.49” X 1.35”.
- 54mm X 88mm X 34mm.
- Environmentally sealed using TPE (for now it’s an epoxy, eventually a TPE over molding of the PCB, supported in the case and the case will be sonically welded, or snap fit.

FCC NOTICE:

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

15.21 Statement - for all intentional and unintentional radiators.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Per 2.1093.c, the RF Exposure requirements are met at 20cm. This unit contains one external oscillator at 20 MHz, with all other RF oscillators inherent to the microcontroller used in the design. The EM250 from Ember is the chip used in the design, and all data for this part can be found via Ember's website at www.ember.com.

DEVICE ILLUSTRATIONS:







