

Innovation and Quality

# **FBM200**



Automatically receives, decodes, logs, and maps all Cospas Sarsat 406 MHz beacon transmissions from a wide surrounding area.

### Features:

- real-time 406 beacon monitoring
- receives all past, present, and future **Cospas-Sarsat channels**
- -125 dBm receiver sensitivity!
- adjustable receiver sensitivity level • measures and displays RSSI (receiver
- signal strength)
- measures and displays frequency
- data logging organizes and timestamps the data
- XML formatted data very useful for database applications
- live beacon activation notification via LED and/or audio alerts
- send alerts via e-mail and/or SMS text messaging
- alarm relay contacts allow use of external lights, buzzers etc.
- DC power and PC interface via USB • Ethernet connectivity (FBM200B) allows for remote management and remote
- diagnostics, and ability to network numerous units for broader coverage • decodes GNSS location and displays
- distance to beacon (FBM200B)
- optional outdoor antenna
- very compact unit (4.3" x 2.5" x 1")
- aluminum construction very rugged
- sits on desk or mounts on wall



### Two models to choose from:

FBM200-A FBM200-B

basic model adds Ethernet interface/GPS receive capabilities and mapping

Applications include port monitoring, airfield monitoring, park monitoring, beacon facility monitoring, remote confirmation that a beacon is transmitting adequate strength (during self-test mode).



# Beacon Monitor

15 Hex ID

122 2012-03-28 16:20

278DE95FFAFFBF

FFFE2F93C6F4AF

EPIRB Serial SLF

Normal Mode (L

Canada (316)

Internal GPS

N 38° 45'00"

W 76° 45'00"

etur Status-2012-04-17 10:12:04 ☆ Connection Status 🔮 Receiver A ☆ 🥑 Audio Alarm On 🕜 Visual Alarm On 🔮 Alarm Popup On 🔮 E-mail Alerts On SMS Alerts Off ☆ 🥑 LED Alarm On 🚺 Audio Alarm On

🔮 Relay Contacts On

Sensitivity -115 dBm

| 2012-03-29 08:41:55     BEEE4099A00022D       2012-03-29 08:40:41     BEEE4099A00022D       2012-03-29 08:10:48     ADDD04CF5141801       2012-03-28 16:38:32     BEEE4099A00022D       2012-03-28 16:32:38     BEEE4099A00022D       2012-03-28 16:20:15     2780E95FFA4DD33       2012-03-28 14:20:09     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:25     279C000000FFBFF       2012-03-28 14:19:25     279C000000FFBFF       2012-03-28 14:19:15     278DE99       2012-03-28 14:19:15     278DE99       210-20-278     14:19:12       210-20-2 |  |  |
|--|--|--|
| 2012-03-29 08:10:48     ADDD04CF5141801       2012-03-28 16:38:32     BEEE4099A00022D       2012-03-28 16:32:38     BEEE4099A00022D       2012-03-28 16:20:15     278DE95FFA4DD33       2012-03-28 14:20:09     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       x:     122       x:     2012-03       ex ID:     278DE9       fex Code:     FFFE2P9       ocol:     EPIRB S       thy:     Canada       t Mode:     Normal       Approval #:     978       al Number:     12285       tion Source:     Internal       liary Radio:   | 2012-03-29 08:41:55  | BEEE4099A00022D  |
| 2012-03-28 16:38:32     BEEE4099A00022D       2012-03-28 16:32:38     BEEE4099A00022D       2012-03-28 16:20:15     278DE95FFA4DD33       2012-03-28 14:20:09     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       x:     212-03       ex ID:     2780E9       fex Code:     FFFE2F9       ocol:     EPIRB 5       thode:     Normal       upproval #:     978       al Number:     12285       tion Source:     Internal       liary Radio:     None   | 2012-03-29 08:40:41  | BEEE4099A00022D  |
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| 2012-03-28 16:20:15     278DE95FFA4DD33       2012-03-28 14:20:09     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03     2780E9       ex ID:     2780E9       fex Code:     FFFE2F9       ocol:     EPIRB S       tMode:     Normal       Approval #:     978       al Number:     12285       tion Source:     Internal       liary Radio:     None       107-110:     Default       ude:     N 38' 45'  | 2012-03-28 16:38:32  | BEEE4099A00022D  |
| 2012-03-28 14:20:09     279C000000FFBFF       2012-03-28 14:20:00     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03     2780E9       ex ID:     2780E9       fex Code:     FFFE2F9       ocol:     EPIRB S       thode:     Normal       Approval #:     978       al Number:     12285       tion Source:     Internal       Iary Radio:     None       107-110:     Default       ude:     N 38' 45'   | 2012-03-28 16:32:38  | BEEE4099A00022D  |
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| 2012-03-28 14:19:15     279C000000FFBFF       2012-03-28 14:18:12     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       x:     122       x:     2012-03       x:     278C000000FFBFF       x:     122       x:     278DE9       ex ID:     278DE9       ex Code:     FFFE2F9       ocol:     EPIRB S       thode:     Normal       Approval #:     978       al Number:     12285       tion Source:     Internal       liary Radio:     None       107-110:     Default       ude:     N 38° 45   | 2012-03-28 14:20:09  | 279C000000FFBFF  |
| 2012-03-28 14:18:12     279C000000FFBFF       2012-03-28 14:09:25     279C000000FFBFF       x:     122       :     2012-03       ex ID:     278DE9       ex Code:     FFFF2F9       ocol:     EPIRB S       thy     Canada       al Number:     12285       tion Source:     Internal       liary Radio:     None       107-110:     Default   | 2012-03-28 14:20:00  | 279C000000FFBFF  |
| 2012-03-28 14:09:25     279C000000FFBFF       x:     122       :     2012-03       ex ID:     278DE9       ex Code:     FFFE2F9       ocol:     EPIRB S       thy     Canada       al Mode:     Normal       Approval #:     978       al Number:     12285       tion Source:     Internal       liary Radio:     None       107-110:     Default       ude:     N 38° 45   | 2012-03-28 14:19:15  | 279C000000FFBFF  |
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|  | :<br>ex ID:<br>fex Code:<br>ocol:<br>tfry:<br>t Mode:<br>Approval #:<br>al Number:<br>tion Source:<br>liary Radio:<br>107-110:<br>ude: | 2012-03<br>2780E9<br>FFFE2F9<br>EPIRB S<br>Canada<br>Normal<br>978<br>12285<br>Internal<br>None<br>Default<br>N 38° 45 |
|  |  |  |

Index Date Recieved (yyyy-mm-dd)

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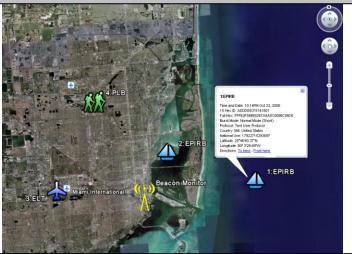
|      | Country       | Frequency (Hz) | Level (dBm) | Comments          |   |  |
|------|---------------|----------------|-------------|-------------------|---|--|
| 122D | Australia     | 406028041      | -66         |                   | 1 |  |
| 122D | Australia     | 406028041      | -65         |                   |   |  |
| 1801 | United States | 406028248      | -95         |                   |   |  |
| 122D | Australia     | 406027837      | -75         |                   |   |  |
| 122D | Australia     | 406027837      | -69         |                   |   |  |
| D33  | Canada        | 406027837      | -64         | MCC notified - WS |   |  |

## FBM200 DATA

|  | EBN | EBN |
|--|-----|-----|
| FEATURES                                     |     |     |
| Receive all Cospas-Sarsat Frequency channels | •   | •   |
| Decode all Cospas-Sarsat Protocols           | •   | •   |
| Measure 406 MHz Frequency                    | •   | •   |
| Measure 406 MHz Receive Power                | •   | •   |
| Adjustable Receiver Sensitivity              | •   | •   |
| USB Interface                                | •   | •   |
| Ethernet Interface                           |     | •   |
| GPS Receiver                                 |     | •   |
| GPS Antenna                                  |     | •   |
| GIS Mapping                                  |     | •   |
| Audio and LED Alarms                         | •   | •   |
| Alarm Output – relay contacts                | •   | •   |

### A GIS Mapping Interface!

The software automatically maps the location of the decoded GNSS location data directly into a map. It displays unique icons for ELTs, EPIRBs, and PLBs, decode information, RSSI, and timestamp of the beacon.



| ORDERING INFORMATION                                    |                |
|---|----------------|
| ITEM  | PART NUMBER    |
| FBM200A   | 910-FBM200A    |
| FBM200B   | 910-FBM200B    |
| Outdoor Antenna – optional (includes mounting hardware) | 420-100        |
| Extension Cable (for use with outdoor antenna)          |                |
| 25' 7.6 m   | 130-022-A      |
| 50' 15.2 m  | 130-022-B      |
| 75' 22.9 m  | 130-022-C      |
| 100' 30.5 m   | 130-022-D      |
| Certificate of Calibration (optional)                   | FBM200-CAL     |
| TM  |                |
| S WST   | WS Technologie |



### INCLUDED USB Cable - (3 m length) ٠ ٠ AC to USB Adapter ٠ Ethernet cable (3 m length) • Molded 406 MHz Monopole Antenna • • 0 **Outdoor 406 MHz Antenna** 0 GPS Active Antenna (5 m cable length) ٠ **Certificate of Calibration** 0 0 **Operator's Manual** • ٠ User Interface Software ٠ ٠ O = optional SPECIFICATIONS 406 MHz Receiver Sensitivity -125 dBm Out of Band Rejection (<400 MHz, >413 MHz) >145 dB Harmonic Image Rejection >95 dB 406 MHz Input Frequency 406.0 - 406.1 MHz 406 MHz RF Input VSWR 1.20:1 406 Input Impedance 50Q **406 Input Connector** SMA-female RP **GPS** Antenna Port bias +3.3V @ 40 mA max **GPS** Antenna Port connector SMA-female Receiver power requirements (from USB port) +5V @ <500 mA **Operating Temperature Range** -40°C to +85°C Storage Temperature Range -55°C to +85°C 108 x 63 x 26 mm

Distributed By:

Dimensions:

Weight:



Model

**1200-B** A200-A

4.3 x 2.5 x 1.0 inches 0.230 kg

0.5 lbs

WS Technologies Inc. is an

ISO 9001 Certified company