



WST

WS Technologies Inc.

BT200 Beacon Tester

The BT200 Beacon Tester is ranked #1 worldwide in performance, quality, reliability, and support.



BT200 FEATURES INCLUDE:

- Measure and decode all Cospas-Sarsat beacons, including:
 - First and Second Generation Beacons (FGB & SGB)
 - ELTs, EPIRBs, and PLBs
 - AIS-EPIRBs, MOBs, AIS-SARTs
 - AIS Transceivers (Class A & B)
 - 121.5, 243, 406, 162 (AIS1 & AIS2) MHz channels
 - ELT(DT) protocol
 - RLS protocol
- Real-time measurement results with Oscillograph
- PDF Test Report generator
- User friendly software included with free updates
- Dedicated customer support team



Your best choice!



BT200 Technical Specification

BT200	add ELT	add AIS (Rx)	add AIS (Rx & Tx)	add SGB
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406 MHz Measurements					Uncertainty
First Generation Beacon (FGB)					
Measure all Cospas-Sarsat Frequency Channels	•				-
15 HEX ID and Full HEX ID	•				-
Decode Message – EPIRB & PLB	•				-
Decode Message – ELT		•			-
Frequency					
Leaving Factory	•				± 50 Hz
Long Term					± 1.0 ppm/yr
Power ¹	•				± 0.25 dB
Power Rise Time	•				± 0.5 ms
Pre-Burst Level	•				± 1.0 dB
Pulse Repetition Period	•				± 10 ms
Bit Rate	•				± 0.1 bps
CW Preamble Time	•				± 0.8 ms
Total Transmission Time	•				± 0.8 ms
Rise Time	•				± 10 µs
Fall Time	•				± 10 µs
Phase Deviation: Positive	•				± 0.02 rad
Phase Deviation: Negative	•				± 0.02 rad
Modulation Phase Symmetry	•				± 0.005
Second Generation Beacon (SGB)					
Decode Message SGB EPIRB & PLB				•	-
Decode Message SGB ELT (ELT & SGB Options Required)		•			-
23 HEX ID and Full HEX ID					-
Power ¹					± 0.25 dB
Power Rise/Fall Time					± 0.1 ms
Pre-Burst and Post-Burst Level					± 1.0 dB
Total Transmission Time					± 0.25 ms
Frequency					
Leaving Factory				•	± 50 Hz
Long Term				•	± 1.0 ppm/yr
Chip Rate Average				•	± 0.05 cps
Chip Rate Variation				•	± 0.05 cps ²
I, Q Relative Offset				•	± 0.5 %
I, Q Peak to Peak Amplitude				•	± 0.5 %
Out-of-Band Emissions				•	± 0.1 %
Error Vector Magnitude (EVM)				•	± 1.0 %
121.5/243 MHz Measurements					
Frequency					
Leaving Factory	•				± 60 Hz
Long Term					± 1.0 ppm/yr
Peak Power	•				± 1.0 dB
Sweep Direction	•				-
Audio Frequency – Upper and Lower	•				± 30 Hz
Audio Sweep Range	•				± 60 Hz
Modulation Index	•				± 5%
Sweep Rep Rate	•				± 0.1 Hz
Duty Cycle	•				± 2%
AIS Measurements					
Frequency (AIS1 & AIS2)					
Leaving factory		•	•		± 60 Hz
Long Term					± 1.0 ppm/yr
Power			•	•	± 1.0 dB
AIS Messages Decode			•	•	-
Tx Frequency				•	± 30 Hz
Graphic Measurements					
-406 Spectrum Mask Graphics Data	•			•	-
-406 Output Power During Burst Graphic Data	•			•	-
-406 Phase Modulation Graphics Data	•				-

50 Ω RF Input		
Cable Connector Termination (130-037)	BNC-f	
VSWR	1.20:1	
Dynamic Range		
Direct Mode	121.5 MHz	+5 dBm to +35 dBm
	243 MHz	+5 dBm to +35 dBm
	406 MHz	+20 dBm to +40 dBm
	AIS	+20 dBm to +40 dBm
Screen Box Mode	121.5 MHz	-16 dBm to +20 dBm (1% to 110%)
	243 MHz	-17 dBm to +24 dBm (1% to 110%)
	406 MHz	-4 dBm to +30 dBm (1% to 110%)
	AIS	+10 dBm to +30 dBm (1% to 110%)
Range		
Antenna Mode	121.5 MHz	>1 m
	243 MHz	>1 m
	406 MHz	>5 m
	AIS	>5 m
Maximum Input Power (Continuous RF)	+34.8 dBm	
Maximum Input Power (406, 121.5, 243)	+40 dBm, Max 1 s @ ≤ 20% Duty Cycle	
Maximum Input Power (AIS)	+43 dBm, Max 27 mS @ ≤ 2% Duty Cycle	
Operating Temperature Range	+5°C to +50°C	
Storage Temperature Range	-20°C to +60°C	
Ingress Rating	IP67	
Connection Type	USB-Micro	
Dimensions and Weight		
BT200: w x l x h mm (inches)	135 (5.31) x 70 (2.76) x 20.0 (0.79)	
Weight	222 g (0.49 lbs)	
Hard Case: w x l x h mm (inches)	363 (14.29) x 284 (11.18) x 124 (4.88)	
Weight	1.90 kg (4.2 lbs)	

¹ 35-39 dBm

Ordering Codes ...

BT200 - 2 0 0 0 B

FUNCTION

0 = EPIRB & PLB
1 = add ELT
2 = add SGB EPIRB & PLB
3 = add SGB ELT

AIS

0 = No AIS
1 = add AIS Rx
2 = add AIS Rx Tx

LIMIT TESTER

0 = No LT
1 = add LT

Developed and manufactured in Canada by:

WS Technologies Inc.

WS Technologies Inc.'s lines of advanced Beacon Testers are the de facto Beacon Testers worldwide. These testers were developed in Canada by engineers that have extensive experience in the development and manufacturing of 406 ELTs, EPIRBs and PLBs. Not only does WST offer the most advanced and comprehensive testers available, we offer unprecedented support for beacon testing issues.