WST
WS Technologies Inc.

CSRM100

Receiver Module

Cospas-Sarsat Receiver Module
406 MHz high gain receiver module for OEM applications.

The CSRM100 is a self-contained, high gain, 406 MHz receiver module specifically designed to receive all Cospas-Sarsat emergency beacon signals. This module is perfect for integrating into your own system.
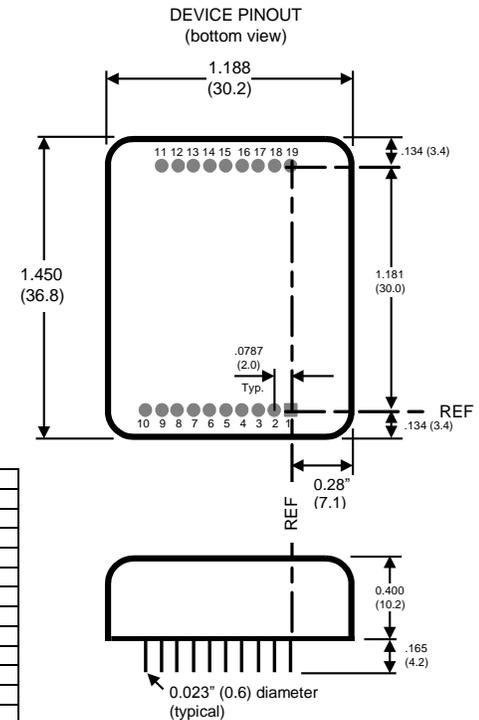
Features include:

- very compact, fully encapsulated module
- high gain receiver -125 dBm sensitivity!
- software adjustable receiver sensitivity level
- monitors entire 406.0 – 406.1 MHz Cospas-Sarsat band
- easily integrated into OEM system
- API command set for module setup and management
- 406 MHz burst in → data out (demodulated message data, self test or normal mode flag, beacon transmit frequency, beacon signal strength, receiver module information
- internal data logging – time and position stamping when GPS is interfaced
- excellent out-of-band rejection – prevents interference against nearly transmitters

DEVICE PINOUT
(bottom view)

1.188 (30.2)

.134 (3.4)

1.450 (36.8)

1.181 (30.0)

.0787 (2.0) Typ.

REF

.134 (3.4)

0.28" (7.1)

REF

0.400 (10.2)

.165 (4.2)

0.023" (0.6) diameter (typical)

ALL DIMENSIONS IN INCHES (MM)

Specification			
FUNCTION	Min	Typ	max
Voltage Supply	3.2V	3.3V	3.4V
Current Consumption		160 mA	180 mA
Current at Shutdown		175 uA	
Operating Temperature	-40ºC		+85ºC
Storage Temperature	-55ºC		+105ºC
RF Input VSWR			1:1.12 (25 dB)
Data Interface	TTL level: 0V – 3V Baud Rate: 115,200 bps Output Message: XML, ASCII, Binary (optional)		
Dimensions –inches (mm)	1.450 (36.8) x 1.188 (30.2) x 0.400 (4.2)		
Weight	0.78 oz, 22 g		
Approvals	CE, FCC, Industry Canada		

PIN	NAME	DECRIPTION
1	GND	Ground
2	PPS	Pulse per second
3	RX1	GPS serial data in
4	TX1	GPS serial data out
5	TX2	Serial data out
6	RX2	Serial data in
7	RESET	Master Reset
8	GND	Ground
9	RF IN	406 MHz RF IN (50Ω)
10	GND	Ground
11	GND	Ground
12	PWR	+3.3V IN
13	EN	Module Enable
14	LED	LED – active low
15	GPIO1	General Purpose IO
16	GPIO2	General Purpose IO
17	GPIO3	General Purpose IO
18	OSC OUT	Oscillator output
19	GND	Ground

WST CSRM100
COSPAS SARSAT
RECEIVER MODULE
S/N   P90001

For a fully integrated Beacon Monitor solution see WS Technologies Inc.'s FBM200 Beacon Monitor.

WS Technologies Inc. is an ISO 9001 Certified company

Patents pending

INTERNATIONAL SATELLITE SYSTEM
COSPAS SARSAT
SEARCH AND RESCUE