SC9800 Tracking Receiver

1. Product Overview

Multimode satellite signal receiving equipment (SC9800) is mainly used to receive L-band DVB carrier, single tone beacon or continuous carrier signal, supporting local display control and remote network access control. The superior capture time, amplitude stability, flexibility and remote web access of the product enable it to meet the satellite searching application of portable station, static communication, dynamic communication and other antenna systems at the same time, and ensure the antenna to realize the rapid identification and tracking application of satellite signals in traditional satellite systems or high-throughput multi beam satellite systems.

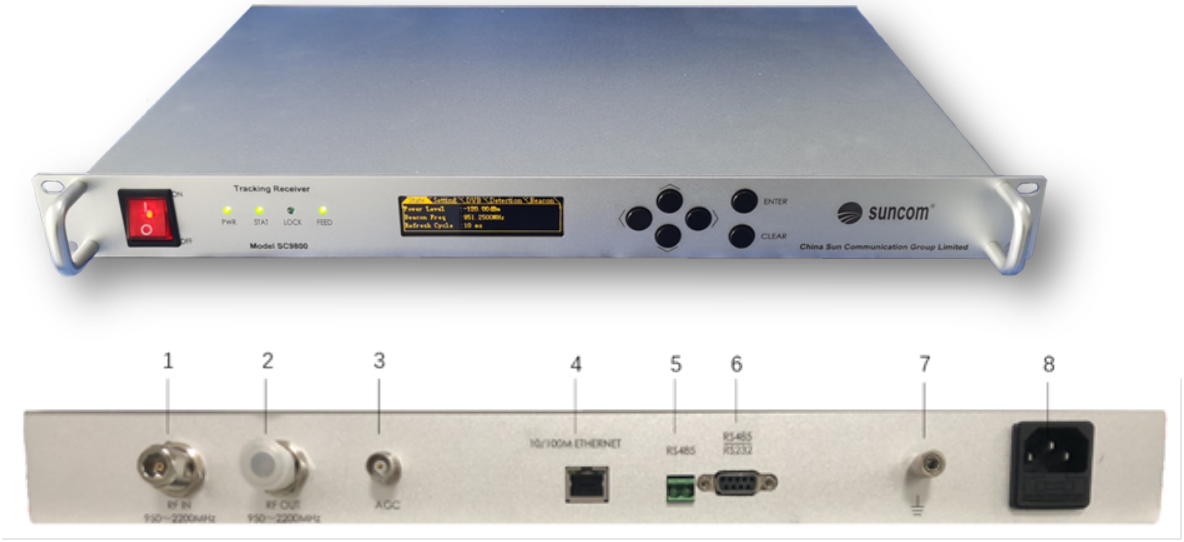

Fig 1: Physical photo of SC9800 tracking receiver

2. Product Features

- It supports three working modes: beacon, DVB carrier and broadband detection
- Fast locking, high sensitivity and large dynamic range
- The refresh cycle can be as short as 4ms
- It has the function of power division and looping out
- Support multiple local oscillator switching
- Support analog AGC output
- Low power consumption
- It supports three control modes: serial port, local display control and remote network access
- High cost performance

3. Structural Dimension

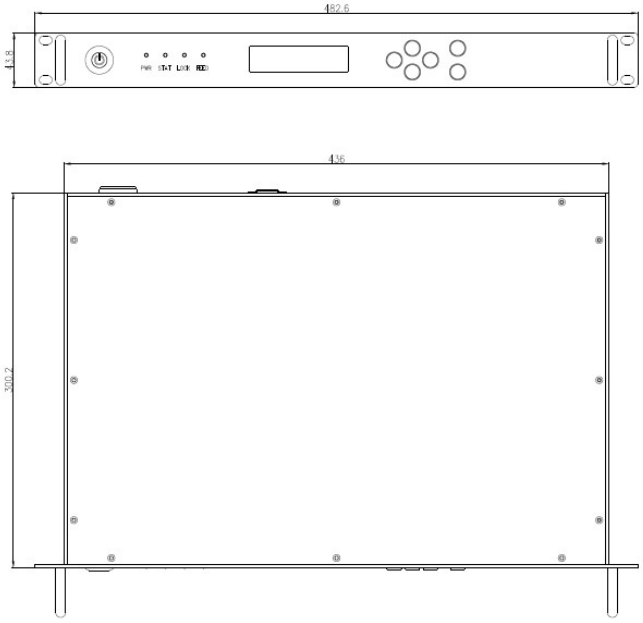

Fig 2: Structural Dimension Drawing

The case adopts standard 1U case. (Length 436mm × Width 300.2mm × Height 43.8mm) (Tolerance ± 1mm).

4. Technical Specifications

Parameter Name		Technical Parameter	Remarks
Input frequency Range		950MHz~2200MHz	
Beacon Mode	Input Power	-100dBm ~-20dBm	30dB gain adjustable
	Capture Bandwidth	±50KHz~±245KHz（Configurable）	Step 1kHz
	Working Threshold	C/N0≤42dBc/Hz	
	Acquisition Time	4ms（Typical value）	
	Receive Status Refresh Cycle	4~60ms（Configurable）	Step 1ms
	Amplitude Stability	≤0.25dB	
	Processing Delay	≤2ms	
DVB Mode	Input Power	-80dBm ~-20dBm	
	Standard	DVB-S/S2/S2X & ACM	
	Symbol Rate	100ksps ~ 500Msps	
	Receive Status Refresh Cycle	4~60ms（Configurable）	Step 1ms
Detection Mode	Input Power	-100dBm~-20dBm	
	Detection Bandwidth	0.2~54MHz（Configurable）	Step 1kHz
	Capture Frequency Deviation	0.1~5MHz（Configurable）	Step 1kHz
	Amplitude Stability	≤0.25dBm	

Parameter Name	Technical Parameter	Remarks
Receive Status Refresh Cycle	4~60ms（Configurable）	Step 1ms
Network Control Interface	RJ45	10/100M
Control Interface 1	DB9 female	RS232/ RS485
Control Interface 2	WJ2EDGR-5.08-2P	RS485
RF Input Interface	N Type	
Power Division Loop Out Interface	N Type	
Analog AGC Output	BNC	
Feed out Voltage	13.4V/18.2V/14.6V/19.4V	4 voltage software can be configured, maximum current 1A
22KHz Single Tone Output	Software Controllable	When feeding, it can output at the same time
Analog AGC voltage indication	0-3.3v/0-5v/0-10v optional	Voltage mapping interval adjustable
Digital AGC voltage indication	0-10V	Voltage mapping interval adjustable
Input Voltage	88~264VAC	
Size	Standard 1U	
Working Temperature	-20℃~+70℃	
Storage Temperature	-40℃~+80℃	