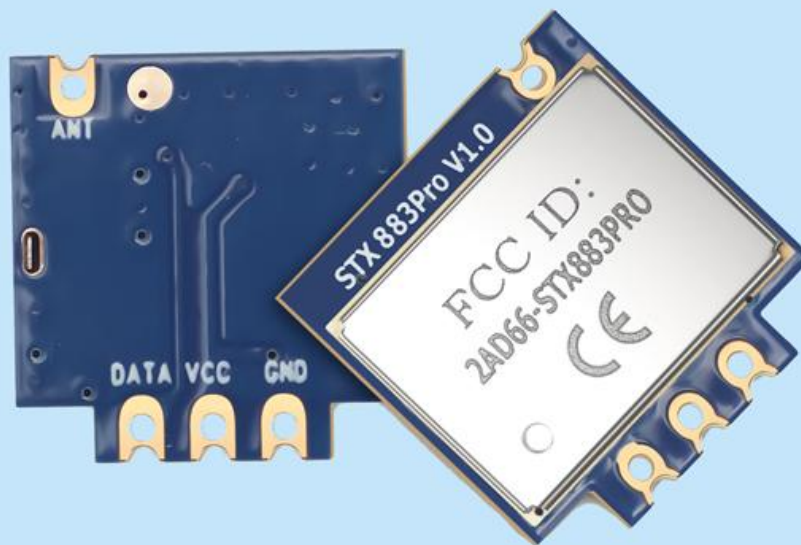


Ultra-thin small size
ASK modulation mode

Product Specification



Catalogue

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Note: Revision History

Revision	Date	Comment
V1.0	2021-4	First release
V1.1	2021-11	Add some parameters

1. Overview

STX883Pro is a small, ultra-thin, low-harmonic ASK transmitter module that can be certified with FCC/CE/ICID etc. It adopts a chip design, which greatly improves the stability of the product. The data port of the module can be directly connected to the microcomputer, so that the development of wireless products is more convenient and faster.

Module	Frequency Band	CE	FCC	Shield
STX883PRO	Center 433MHz	Yes	NO	Yes

2. Features

- Frequency range: 433/315 MHz
- ASK modulation mode
- long range
- Stable and reliable frequency
- FCC/ CE certification

3. Applications

- Remote control door
- Wireless security alarm
- Wireless consumer products
- Wireless data transmission

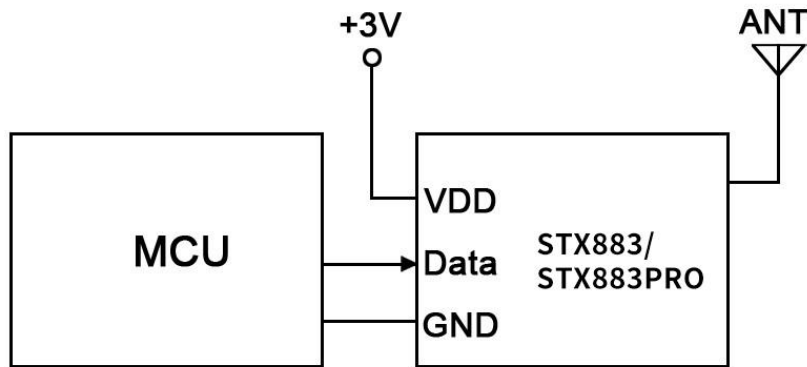
4. Electrical Characteristics

Parameter	Min.	Typ.	Max.	Unit	Condition
Operation Conditions					
Working voltage range	1.2	3.0	5	V	
Temperature voltage	-20	25	70	°C	
Current Consumption					
TX current		<20		mA	@3.3V,10dBm
Sleep current		≤0.01		uA	When @DATA is low
RF Parameter					
Frequency range	433.82	433.92	434.02	MHz	@433 MHz
	314.925	315	315.075	MHz	@315 MHz
Transmit power		10		dBm	@3.3V
Data rate	0.1		5	Kbps	

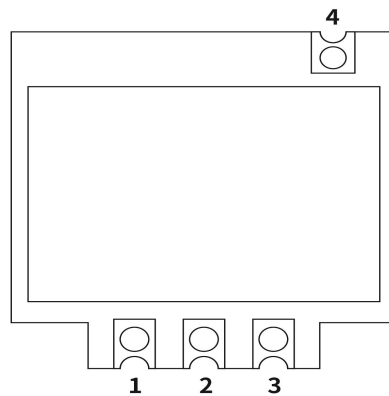
5. Voltage, power and current comparison table

STX883 / STX883Pro		
Voltage (V)	Power (dBm)	Current (mA)
2	2	5.6
2.5	6.4	7.5
3	8.7	8.6
3.3	10.0	9.2
3.6	11	9.7
4.0	11.7	10.1
4.5	12.44	10.2
5.5	12.66	10.3

6. Typical application circuit



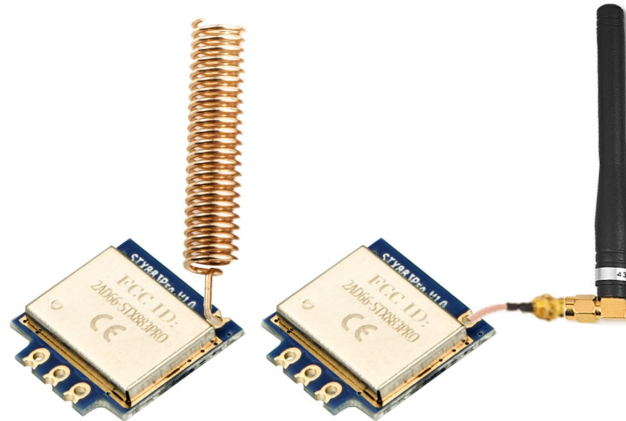
7. Pin definition



Pin NO.	Pin name	Description
1	GND	Power ground
2	VCC	Connect the power supply positive
3	DATA	Data input
4	ANT	Antenna input

8. Peripheral accessories

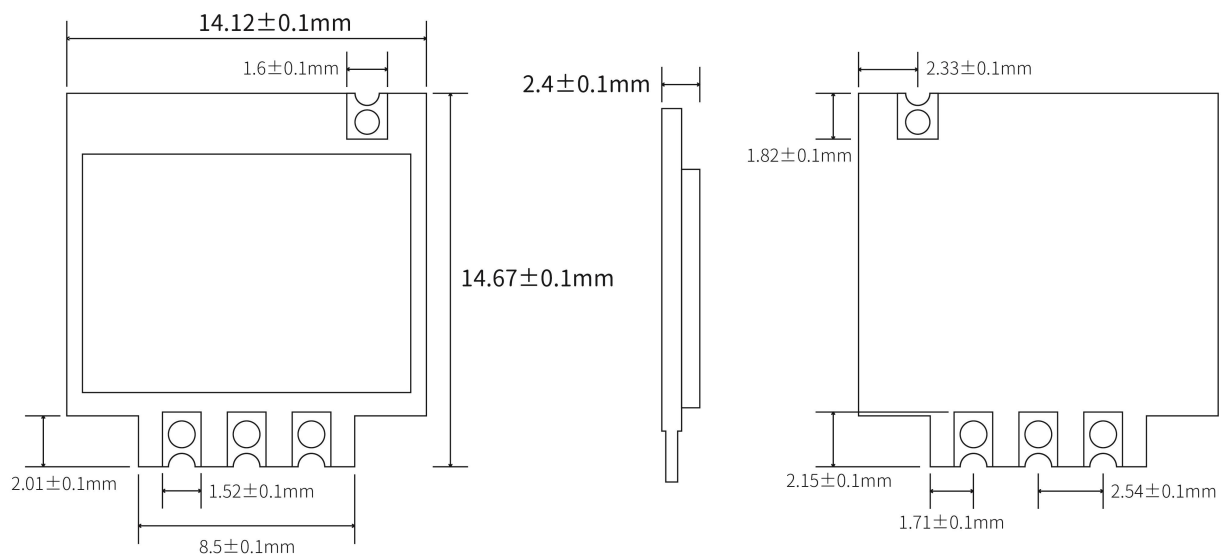
The antenna is an important part of the communication system, and its performance directly affects the indicators of the communication system. The antenna impedance required by the module is 50 ohms. Common antennas include spring antennas, and can also be transferred to straight/elbow/folded rods, small suction cups, etc. through SMA. Users can choose antennas according to their own application environment. In order to keep the module in the best working condition, it is recommended to use the antenna provided by our company.



★ During the use of the antenna, the following principles should be followed to ensure the best communication distance of the module:

- The antenna should not be close to the ground surface as much as possible, and the surrounding area should be kept away from obstacles.
- If you purchase a suction cup antenna, straighten the lead as much as possible, and the suction cup base must be attached to a metal object.

9. Mechanical size (unit: mm)

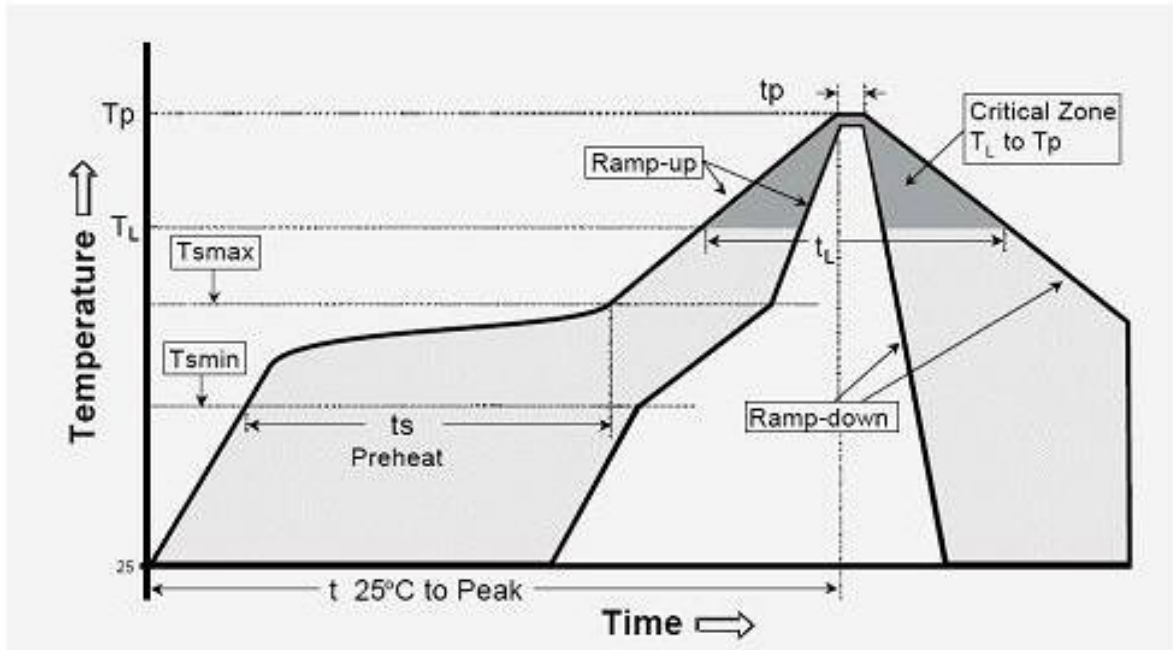


10. Product order information

The product models are as follows:

Order model	Product type
STX883Pro-433	The working frequency band of the product is 433 MHz
STX883Pro-315	The working frequency band of the product is 315 MHz

Appendix: Furnace temperature curve diagram



IPC/JEDEC J-STD-020B the condition for lead-free reflow soldering	big size components (thickness $\geq 2.5\text{mm}$)
The ramp-up rate (T_l to T_p)	3°C/s (max.)
preheat temperature	
- Temperature minimum (T_{smin})	150°C
- Temperature maximum (T_{smax})	200°C
- preheat time (t_s)	60~180s
Average ramp-up rate (T_{smax} to T_p)	3°C/s (Max.)
- Liquidous temperature (T_l)	217°C
- Time at liquidous (t_L)	60~150 second
peak temperature (T_p)	245+/-5°C