# Sky LoRa S76-P01



Transceiver	SX1276
MCU	AcSiP STM32L073xZ
Operating supply voltage	3.3V
Frequency	EU868/US915 MHz
Band Width	62.5~500KHz
Modulation	LoRa/GFSK/FSK/OOK/MSK/GMSK
Transmit power	+20dBm max.
Sensitivity	Down to -137dBm
Data rate	300Kbps(FSK)
Communication distance	10Km
Antenna impedance	50Ω
Operating temperature	-40°C ~ +85°C
Storage temperature range	-50°C ~ +105°C
Dimension	23.5mm×23.2mm×3.1mm

### **PIN Definition**

N/A	<b>1</b>	24 〈	NRST
PC10	2	23 ⟨	PB0_IO_INT1
PA6_SPI1_MISO	3	22 ⟨	PA9_USART1_TX
PC6	<b>4</b>	21 ⟨	PA10_USART1_RX
PB6_SCL	<b>5</b>	20 ⟨	PB1_IO_INT2
PB7_SDA	6	19 ⟨	PA13_SWDIO
PC4	7	18 ⟨	PA14_SWCLK
PC2	8	17 ⟨	PB15
PC3	9	16 ⟨	+3.3V
GND	⟩ 10 <del>-                                  </del>	15 ⟨	+3.3V
ANT	<b>)</b> 11	14 ⟨	GND
GND	∑ 12 <del>[]</del>	<b>13</b> ⟨	GND

#### **Note**

The module transmission data rate will affect Transmission distance, the higher the data rate, the closer the distance, and the lower the receiving sensitivity.

The supply voltage to the module will affect TX power, in the operating supply voltage range, the lower the voltage to get the lower the TX power.

The antenna will strongly affect the communication distance, please select matched antenna and connect it correctly.

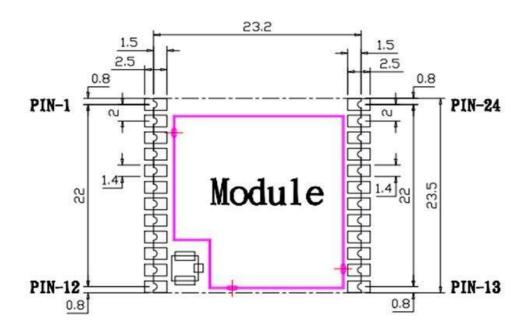
The module mount will affect the communication distance.

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# **Pin Configuration**

PIN#	PIN NAME	Function Description
1	N/A	N/A
2	PC10	For RS485/1:RS485 Tx, 0: RS485 Rx
3	PA6_SPI1_MISO	GPIO
4	DO1	ModBus-1, DO
5	PB6_SCL	Channel Scan
6	PB7_SDA	Channel Scan
7	PC4	GPIO
8	PC2	GPIO
9	PC3	Cfg Mode(0)/Normal Mode(1) Sel
10	GND	GND
11	ANT	ANT
12	GND	GND
13	GND	GND
14	GND	GND
15	+3.3V	+3.3V
16	+3.3V	+3.3V
17	DO2	GPIO
18	PA14_SWCLK	S/W GPIO - P01, ModBus-2, DO
19	PA13_SWDIO	S/W GPIO - P03, ModBus-2, DI
20	DI2	GPIO
21	PA10_USART1_RX	Pass Through UART RX
22	PA9_USART1_TX	Pass Through UART TX
23	DI1	ModBus-1, DI
24	NRST	Reset

## **PCB Dimension**



#### Note

- The module power supply voltage is recommended work at DC3.3V.
- The module interface uses half circle pad to soldering on the system PCB board, the GND must soldering to the system digital GND reliably, or use connector to connect main-board.
- The antenna must get to the module's ANT pin as close as possible.