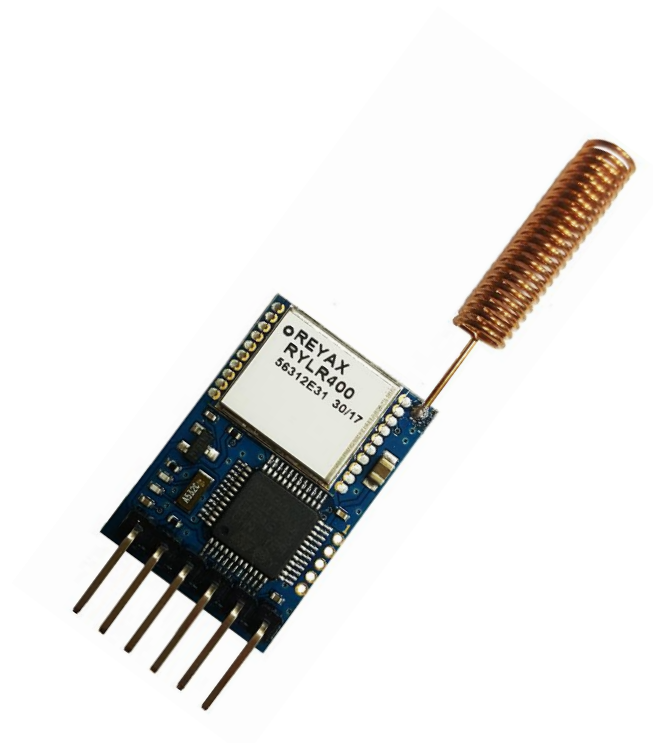


# RYL406

UART Interface  
426/433/470MHz LoRa®  
Antenna Transceiver Module

Datasheet



## PRODUCT DESCRIPTION

The RYLR406 transceiver module feature the LoRa long range modem that provides ultra-long range spread spectrum communication and high interference immunity whilst minimising current consumption.

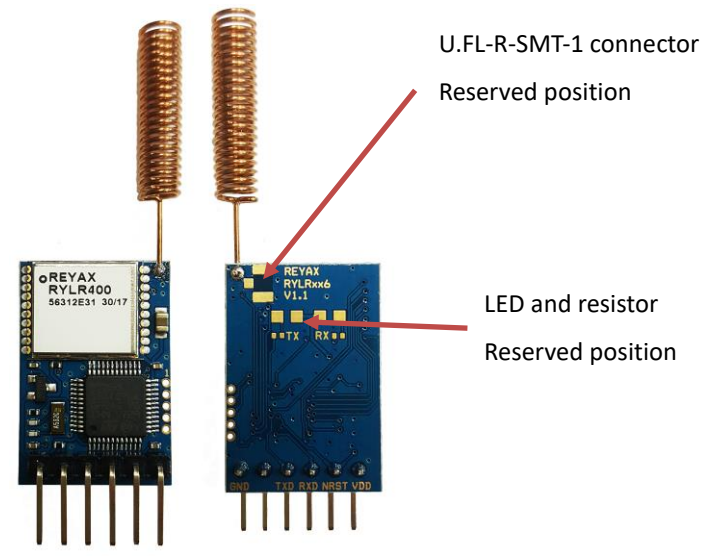
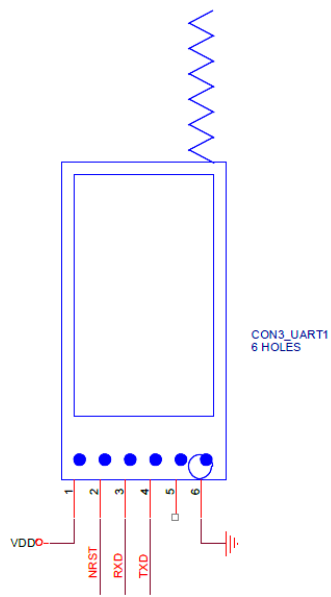
## FEATURES

- Semtech SX127x Engine
- Excellent blocking immunity
- Low receive current
- High sensitivity
- Control easily by AT commands
- 127 dB Dynamic Range RSSI
- Designed with integrated antenna
- AES128 Data encryption

## APPLICATIONS

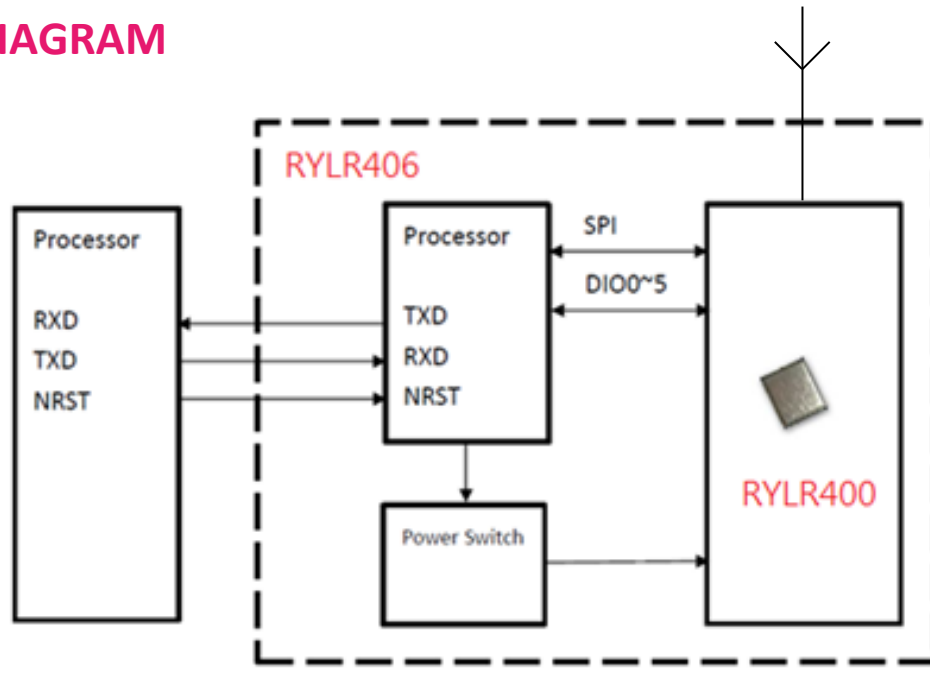
- IoT Applications
- Mobile Equipment
- Home Security
- Industrial Monitoring and Control Equipment
- Car Alarm

## PIN DESCRIPTION



Pin	Name	I/O	Condition
1	VDD	I	Power Supply
2	NRST	I	RESET(Active Low)
3	RXD	I	UART Data Input
4	TXD	O	UART Data Output
5	NC	-	
6	GND	-	Ground

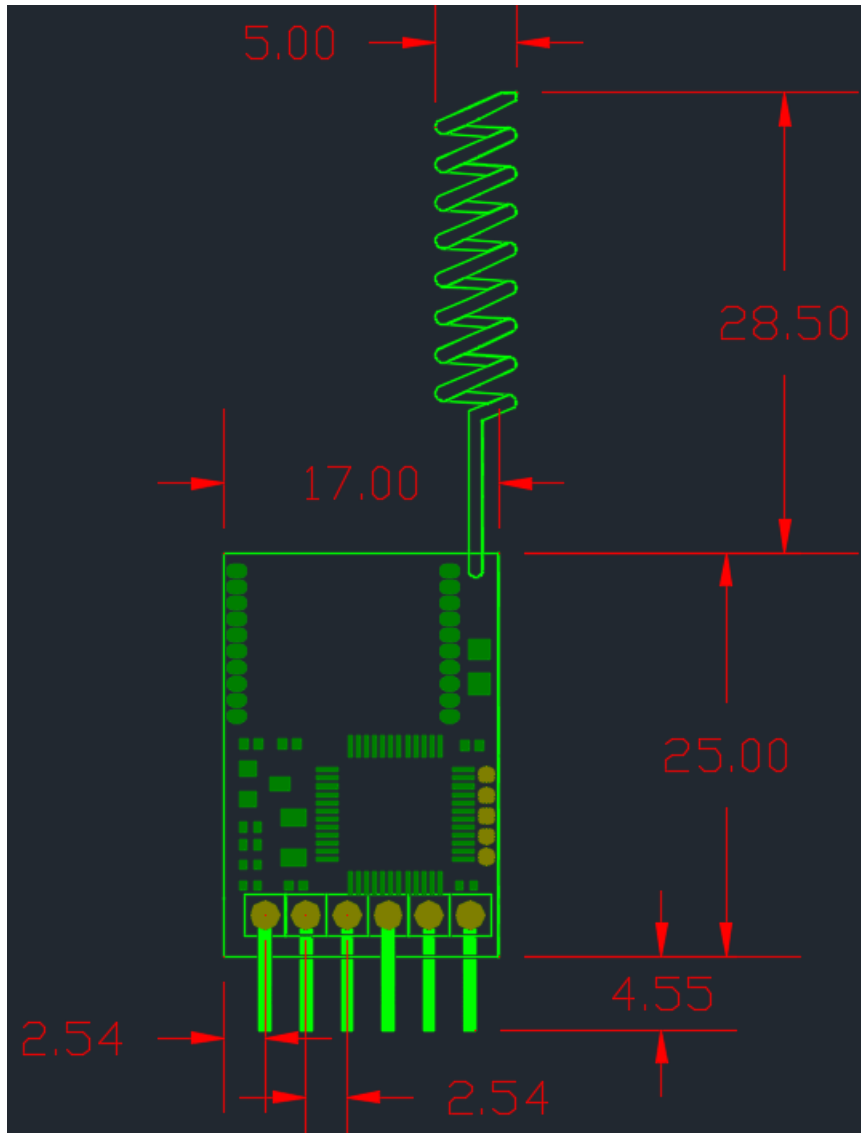
## BLOCK DIAGRAM



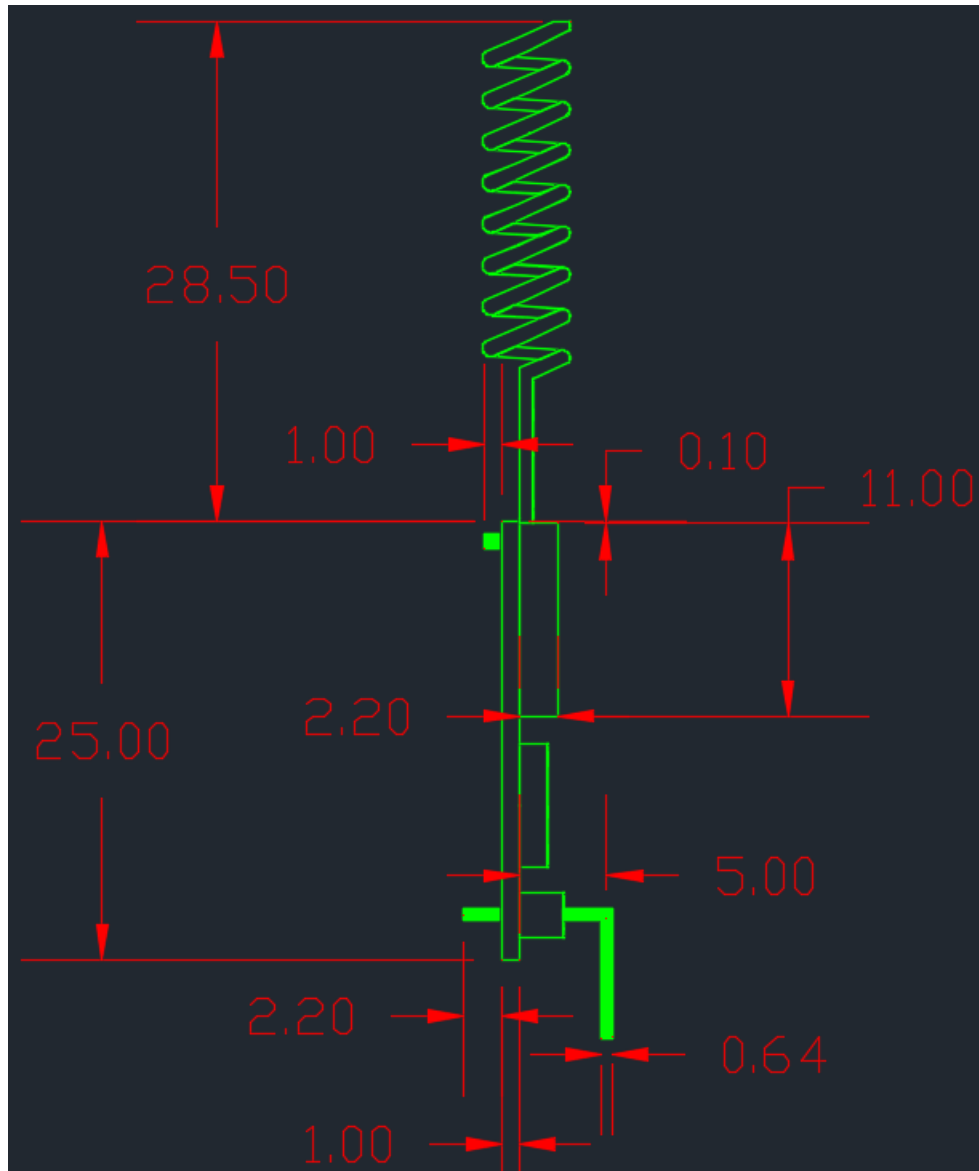
## SPECIFICATION

Item	Min.	Typical	Max.	Unit	Condition
VDD Power Supply	2	3.3	3.6	V	VDD
RF Output Power Range	-4		15	dBm	
Filter insertion loss	1	2	3	dB	
RF Sensitivity	-148			dBm	
RF Input Level			10	dBm	
Frequency Range	390	433	525	MHz	
Frequency Accuracy		±2		ppm	
Communication Range		4.5	15	KM	Depend on RF parameter
Transmit Current		43		mA	RFOP = +15 dBm
Receive Current		16.5		mA	AT+MODE=0
Sleep Current		0.5		uA	AT+MODE=1
Baud rate	300	115200	115200	bps	8, N, 1
Digital Input Level High	0.7*VDD		VDD	V	VIH
Digital Input Level Low	0		0.3*VDD	V	VIL
Digital Output Level High	0.9		VDD	V	VOH
Digital Output Level Low			0.1	V	VOL
Cycling (erase / write) EEPROM data memory		300		K	Cycles
Weight		7		g	
Operating Temperature	-40	25	+85	°C	

## DIMENSIONS



Unit : mm



Unit : mm

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