



RISE420 LoRaWAN IO Controller

Hardware System

STM32L072CZT6 MCU
 SX1276/78 Wireless Chip
 Power Consumption:
 Idle: 4mA@12V
 20dB Transmit: 34mA@12V

Interfaces

3 x Digital Input (Max, 6V)
 3 x Digital Output (Max output, 36V,450mA)
 2 x Relay Output (5A@250VAC / 30VDC)
 2 x 0~20mA Analog Input (res:0.01mA)
 2 x 0~30V Analog Input (res:0.01v)
 Power Input 7-24V DC.

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LoRa Specifications

Frequency Range:
 Band 1 (HF): 862 ~ 1020 Mhz
 Band2(LF):410~528Mhz
 168 dB maximum link budget.
 +20 dBm - 100 mW constant RF output
 +14 dBm high efficiency PA.
 Programmable bit rate up to 300 kbps.
 High sensitivity: down to -148 dBm.
 Bullet-proof front end: IIP3 = -12.5 dBm.
 Excellent blocking immunity.
 Low RX current of 10.3 mA, 200 nA register retention.
 Fully integrated synthesizer with a resolution of 61 Hz.
 FSK, GFSK, MSK, GMSK, LoRaTM and OOK modulation.
 Built-in bit synchronizer for clock recovery.
 Preamble detection.
 127 dB Dynamic Range RSSI.
 Automatic RF Sense and CAD with ultra-fast AFC.
 Packet engine up to 256 bytes with CRC.