AUTOID UF2

Compact UHF RFID Integrated Reader

An embedded QM100 engine is included in the UF2 UHF reader developed by SEUIC. TCP/IP protocol interface is standard, and CAN, RS232, RS485 and other protocols are optional. Combined with proprietary and efficient signal processing algorithms, it achieves a high reading rate and fast tag reading, making it suitable for various applications, including logistics, production control, etc.

Product Features

Strong core and performance

A strong protection grade, IP67, is suitable for environments involving moisture, dust, oil, and other harsh industrial elements. Long-lasting and durable M12 industrial joint with a stable connection. A highly flexible industrial interconnection system that supports multiple communication protocols such as RS232/485, CAN, TCP/IP, and many more.

Simple deployment

The device's size is small, 95x95x36mm, making it easy to deploy quickly.

Specifications

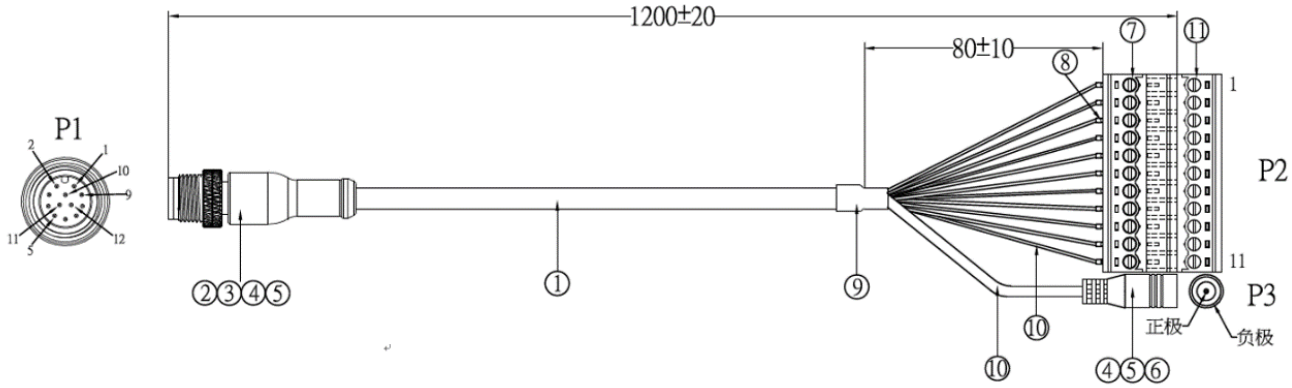
Physical and Environment Parameters	
System	STM32
RAM	192K Byte
ROM	1M Byte
Interface/Communication	Default network port (10/100M adaptive speed), Optional CAN Optional RS232 (rate 115.2Kbit/s) Optional RS485 (half duplex)
Power supply	12V DC
Power consumption	< 12W
Interface	M12 industrial interface * 2 Including power supply, GPIO and communication interfaces
Input and output	By default, 2-in 2-out optocoupler isolated GPIO, compatible with 5-24V level Support GPIO customization
Notification method	Buzzer, LED indicator
Size	3.7 in. L x 3.7 in. W x 1.4 in. H 95mm L× 95mm W× 36mmH
Weight	12.3 oz./350g (different according to different configurations)
Working temperature	-4℉/-20 ℃ to +122℉/+50 ℃
Storage temperature	-40℉/-40 ℃ to +185℃/+85 ℃
Humidity	5% to 95% RH non-condensing
Waterproof and dustproof industrial grade	IP67
Seismic resistance	Vibration amplitude: 2cm. Vibration frequency: 1~10Hz. Vibration direction: up, down, left, right and random.

Electrostatic discharge (ESD)	± 8kV contact discharge
RFID Performance Parameters	
Tag protocol	EPC C1 GEN2 / ISO18000-6C
Working frequency	Default: 920MHz - 925MHz (China) 860Mhz – 960Mhz (it can be adjusted according to the requirements of different countries or regions)
Work mode	Default random frequency hopping, support fixed frequency
Output power	10-30dBm adjustable, step power 1dBm
Antenna gain	2dbiC (circular polarization)
Read distance	>2m (H47 tag), the actual distance is related to the tag and environment
Write distance	0-1m (H47 tag), the actual distance is related to the tag and environment
Multi-tag speed	>40pcs/s (H47 tag), the actual speed is related to the tag and environment
Third Party Application Development Support	
Upper computer software	Windows/Linux/Android
System programming environment	VS2015
Accessories	
Standard hardware	M12 12Pin power supply +GPIO adapter cable, M12 8Pin communication adapter cable
Standard software	Upper computer Demo, Demo user manual SDK, interface user manual

II. Interface Inllustration

2.1 Connection line M12-12P

L102-M12A-12PIN signal definition diagram

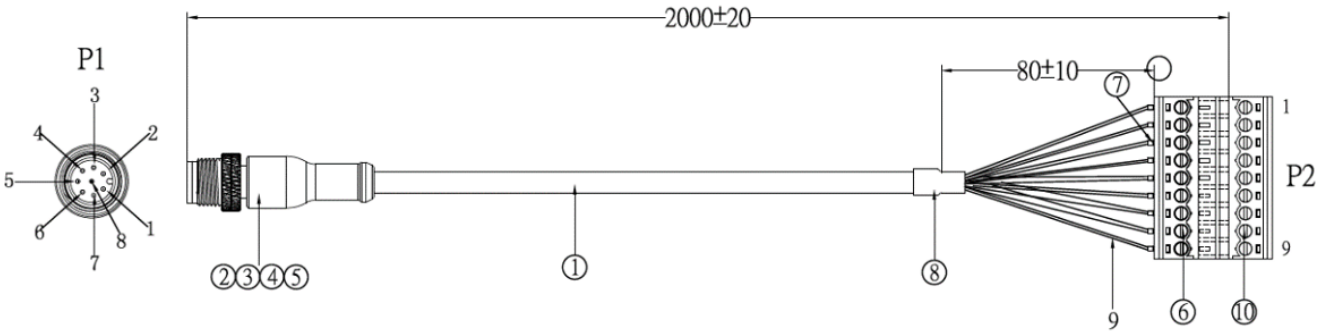


P1 PIN	Color	PIN Name	P2 PIN	P3 PIN

1	black	negative pole		negative electrode
2	red	positive pole		positive electrode
3	white	signal ground	1	
4	blue	channel 1	2	
5	orange	channel 1 output power supply	3	
6	yellow	channel 2	4	
7	purple	channel 2 output power supply	5	
8	gray	channel 3 output power supply	6	
9	green	channel 3	7	
10	Pink	channel 4 output power supply	8	
11	brown	channel 4	9	
12	sky blue	signal ground	10	
SHELL	ground wire+weave	PE	11	

2.2 Connection line M12-8P

L102-M12A-8PINsignal definition diagram



P1 PIN	Color	PIN Name	P2 PIN
1	white/blue	TXD（RS232)	1
2	brown/white	A(485)	2
3	brown	B(485)	3
4	orange	GND	4
5	green/white	CAN-H	5
6	orange/white	GND	6
7	blue	RXD(RS232)	7
8	green	CAN-L	8
casing	ground wire+weave	PE	9