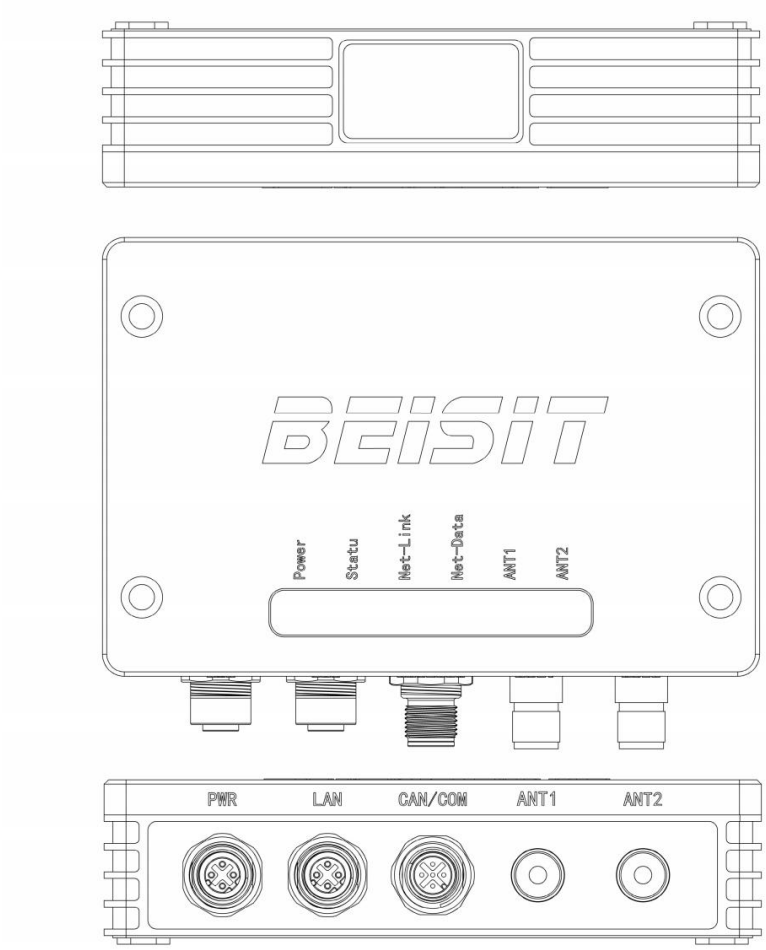
F20H Reader Product Specification



Product Name: UHF RFID Reader

Product Model: FBUR-F20H-S01

Product Appearance:

Hardware Functionality

Product Features:

UHF RFID dual-channel industrial-grade reader with high protection level and high performance, possessing strong anti-interference capability. It adopts an industrial connector design and is enclosed in a full aluminum alloy shell, making it suitable for various industrial application scenarios.

1.1 Basic Parameters

RFID Protocol	EPC C1G2/ISO 18000-6C	Sensitivity	-86dBm
Maximum Power	33dBm	Read Rate	>800张/s
Frequency	860~960Mhz	Read Range	>15m（Relating to Antennas and Tags）
Power supply	DC9~36V	Dimensions	127(L)*109(W)*38(H)mm
Weight	<600g	Storage Temperature	-40~+85℃
Operating Temperature	-40~+70℃	Environmental Humidity	5%~95%rh

1.2 Interface

Power Interface	M12-4P-A-Female	Communication Interface	M12-4P-D-Female(LAN) M12- 8P-A-Male(RS232、RS485)
RF Interface	2个TNC,External Thread and Internal Pin		

1.3 Indicator light

Power light	● Green light (always on when powered, indicating normal operation)
Signal light	● upgrading, it flashes once every 1 second; there is a fault, it flashes twice every 1 second.
Network light	● Green light (remains constantly on when the network connection is successful)
Network data light	● Yellow light (flashes during network data transmission)
Antenna light	● Blue light (remains constantly on after antenna setup, flashes when reading tag data)

1.4 Certification

Certification	SRRC、CE、FCC、ROHS、IP

Software Functionality

2.1 Support Agreement

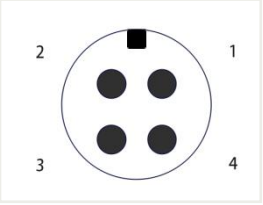
IEC\ISO EPC C1G2/ISO 18000-6C 、ISO 18000-6B(Optional equipment)

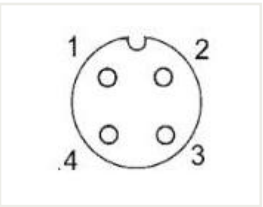
2.2 Support for Other Features

- Support online firmware burning and upgrading
- Support multiple communication protocols and interfaces
- Support standard functions of air interface protocol: read, write, lock, kill, etc.
- Support various data upload modes including EPC+TID, EPC+USER, EPC+RFU, EPC+TID+USER, EPC+TID+RFU
- Support various tag reading modes for different scenarios: multi-tag group reading, single-tag long-range reading, adaptive reading, low-power mode
- Support power setting: 5~28dBm, adjustable in 1dBm steps
- Support working frequency band setting for each region, customizable frequency band or frequency point setting
- Support tag return of RSSI, carrier, and phase
- Support over-temperature protection with temperature accuracy of 0.5 degrees
- Support setting of working time and interval time for each antenna
- Support BLF parameter link setting for strong group reading performance
- Support filtering tag operations, support network heartbeat packets, support CW wave switch, Session value setting, Q value setting
- Support software and hardware watchdog
- Support remote restoration of factory settings.

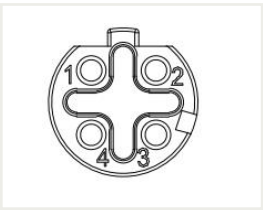
Interface Definition

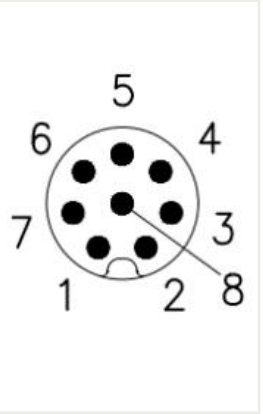
3.1 Power

Working power supply Type 1	
Device M12-4PIN-A Male	
	P1 VIN
	P2 VIN
	P3 GND
	P4 GND

Working power supply Type 2	
Device M12-4PIN-A Female	
	P1 VIN
	P2 VIN
	P3 GND
	P4 GND

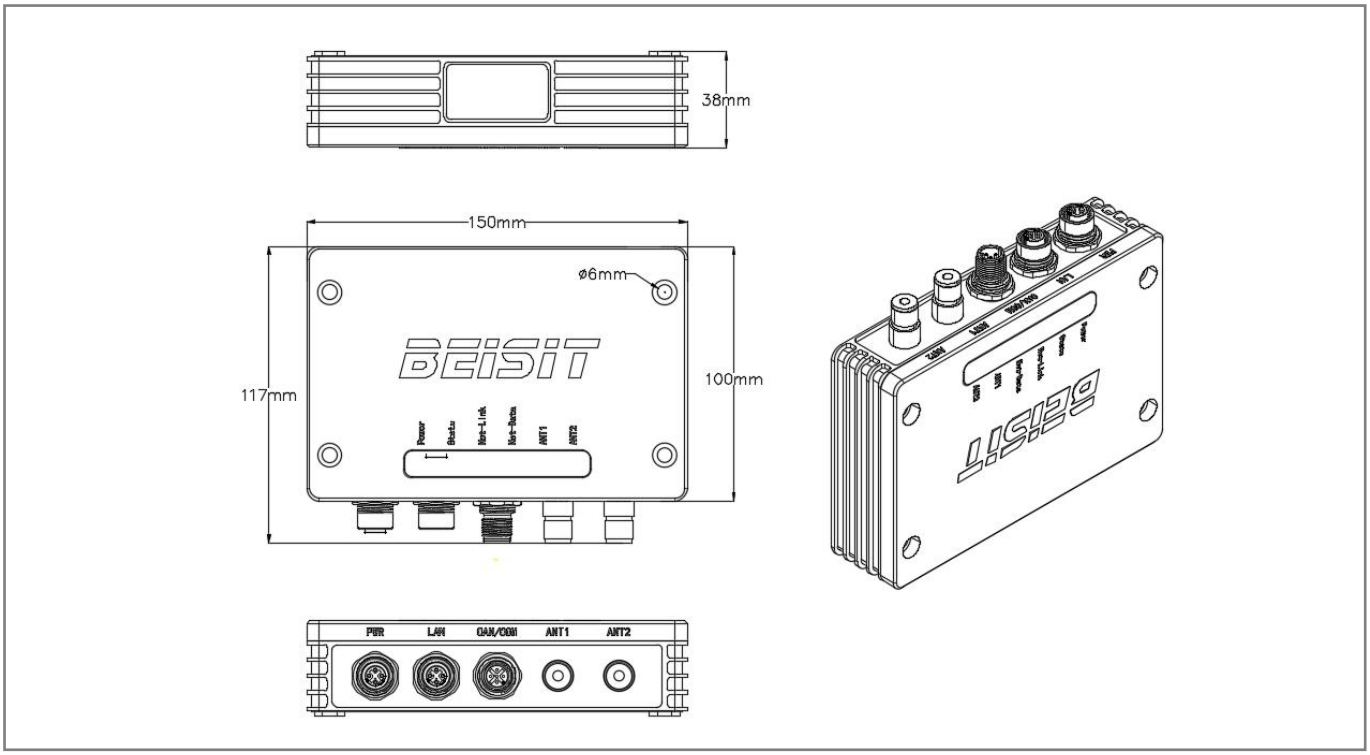
3.2 Communication

Ethernet	
Device M12-4PIN-D Female	
	P1 TX+
	P2 RX+
	P3 RX-
	P4 TX-

Com	
DeviceM12-8PIN-A Male	
	P8 NC
	P7 NC
	P6 RS232-RX
	P5 RS232-TX
	P4 RS485-B
	P3 RS485-A
	P2 GND
	P1 VIN

Other Parameters

4.1 Product Dimensions



FCC Warning

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class

B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.