

# Temperature Measurement

## E510 Modbus RFID Integrated Reader



### General Description

FU0045 E510 Modbus RFID Integrated Reader is a high-performance UHF RFID integrated reader. It is designed upon fully self-intellectual property. Based on proprietary efficient digital signal processing algorithm, it supports fast tag read/write operation with high identification rate. It can be widely applied in many RFID application systems such as logistics, access control, anti-collision and industrial production process control system.

### FEATURES

- Self-intellectual property;
- Design based on gen2 chipset with excellent anti-collision performance
- Support ISO18000-6C (EPC C1G2) protocol tag;
- 860~960MHz frequency band (frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF output power up to 30dbm(adjustable);
- 6dBi antenna gain with effect distance up to 0~25m;
- Support auto-running, interactive work mode;

- Low power consumption
- Power supply DC9V-36V
- Interface: 8pin aviation plug
- Communication Protocol: RS485 RTU Modbus
- Temperature measurement: -40°C - 160°C
- Temperature accuracy: ±1°C
- Door open/close sensor range: 0-20mm
- Dimension: 128\*128\*50mm (excl. installation kit)
- Weight: 1.1kg (excl. installation kit)
- Installation: screw mount (DIN35 installation option)
- DO output: DC9-36V/100mA

## CHARACTERISTICS

- Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V
Operating Temp	T <sub>OPR</sub>	-10~+60	°C
Storage Temp	T <sub>STR</sub>	-25~+80	°C

- Electrical and Mechanical Specification

Under T<sub>A</sub>=25°C, VCC=+9V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	9	12-24	36	V
Current Dissipation	I <sub>C</sub>		350	650	mA
Frequency	F <sub>REQ</sub>	860		960	MHz
Effective Distance	DIS	300	1200		cm

\* Effective distance depends on antenna, rfid tag and environment.

## PIN DESCRIPTION

ITEM	COMMENT
Red	DC 9-36V
Black	GND
Purple	RS485 R+
Orange	RS485 R-
White	DO+ (Alarm LED)
Brown	EGND
Gray	DO- (Alarm LED)