

USER MANUAL

WDU060EM

Performance Specifications

Specification Item	Technical Parameters / Description
Model	WDU060EM
Operating Voltage	DC 12V
Operating Current	Max. 120mA
Operating Frequency	13.56 MHz
Card Reading Response Time	Less than 0.1 seconds
Supported Card Operations	Read card serial number or read customer-defined card number within data blocks
Supported Cards	Mifare 1 (ISO14443A compliant)
Operating Distance	70 - 100 mm
Device Protection	Power reverse polarity protection; Data line voltage withstand protection, $\pm 15V$
Data Transmission Distance	> 60 meters
Operating Ambient Temperature	0°C to 60°C
Storage Temperature	-20°C to 70°C
Wiegand Output	Wiegand 26 / 34

Lead Wire Electrical Characteristics

No.	Color	Name	Electrical Characteristic Description
1	Black	GND	Ground

2	Red	12VDC	DC power input, greater than 200mA
3	Green	D0	Wiegand 26 Data 0; normal high level > 4.7V, low level active
4	White	D1	Wiegand 26 Data 1; normal high level > 4.7V, low level active
5	Gray	Wiegand 34	Connected in parallel with the black wire (GND)

Installation Instructions

1. Use a Phillips screwdriver to loosen the screws fixing the panel and the backplate, remove the backplate, and use screws to secure the backplate onto the side wall of the access control entry/exit point. (Note: If surface-mounted on a wall, concealed installation requires pre-embedding an 86 junction box).
2. Route the reader cables through the cable exit hole, connect the wires according to the manual, and then secure the reader panel to the backplate with screws.

Installation Precautions

- Before powering on, you must confirm the power supply voltage (DC12V) and the positive/negative terminals.
- When using an external power supply, it must share the same power source or common power ground with the controller.
- The wire cross-sectional area from the card reader to the controller is recommended to be 0.22 mm² or greater; the maximum transmission distance must not exceed 100 meters. The shield wire can be connected to the controller's GND to thicken it, or two strands can be combined into one to supply power to the reader, which helps improve reader performance.