

MR-2800a

8 channels DO remote terminal Unit

■ Features

- Digital Output Module with 8 isolated channels
- Sink-type (NPN) digital output with overload protection
- Supports LED output indicator for every channel
- Wide load voltage: +3.5 to +50 V_{DC}
- Short circuit protection
- 4 kV ESD protection
- 3750 V_{DC} intra-module isolation
- Configurable power-on value settings
- Wide operating temperature range: -25 to +75°C
- Supports Modbus RTU protocol



■ Introduction

The MR-2800a offers 8 isolated digital output channels with 8 LED indicators to monitor the status of the digital output. Combining sink-type output and short circuit protection, the MR-2800a has industrial-grade safety design standards with 4 kV ESD protection and 3750 VDC intra-module isolation. The MR-2800a supports the Modbus RTU protocol and options to enable both power-on and safe values.

■ Specifications

Digital Output

Number of Ports	8
Type	Sink (NPN)
Load Voltage	+3.5 to +50 V _{DC}
Maximum Load Current	700 mA/Channel
Power On Value	Yes
LED Indicator	Yes

Serial Interface	
Console Port	RS-485(D+, D-), RS-232(GND, Tx, Rx)
Number of Ports	2
Serial Standards	RS-485, RS-232
Data Transfer Rate	Up to 115.2 kbps
Data Format	(N, 8, 1), (N, 8, 2)
LED Indicator	Yes, Tx (Yellow), Rx (Green)

Software Feature	
Protocols	Modbus RTU
Mode	Modbus RTU Slave
Configuration Option	Windows Utility

Power	
Power Input	10 to 30 V _{DC}
Power Consumption	< 1W
LED Indicator	Yes, Pwr (Red)

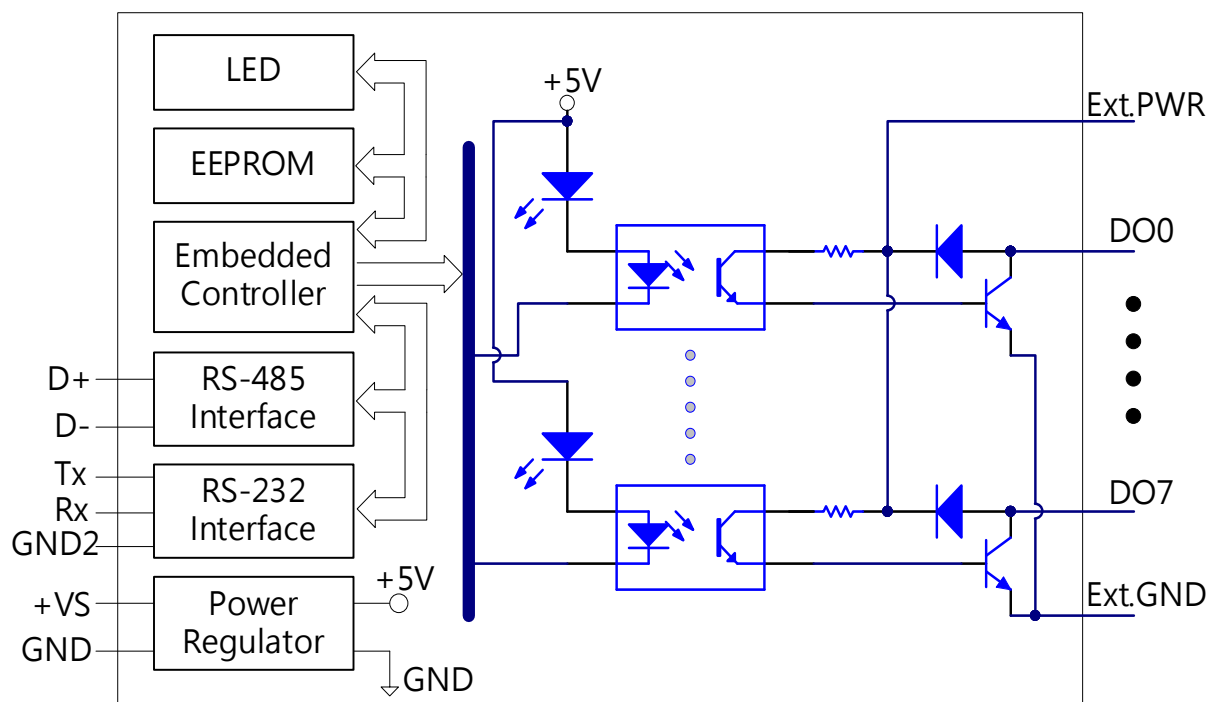
Protection	
Power Isolation	Yes
Digital Output	±60 V _{DC} overvoltage protection
	1.3 A (With short-circuit) overload protection
Intra-Module Isolation	3750 V _{DC} (Field-to-Logic)
ESD Protection (IEC 61000-4-2)	±4 kV Contact for each Terminal
	±8 kV Air for Random Point
Reverse Polarity Protection	Yes

Mechanical	
Dimensions (L x W x H)	114mm x 66 mm x 30 mm
Installation	DIN-Rail or Wall Mounting

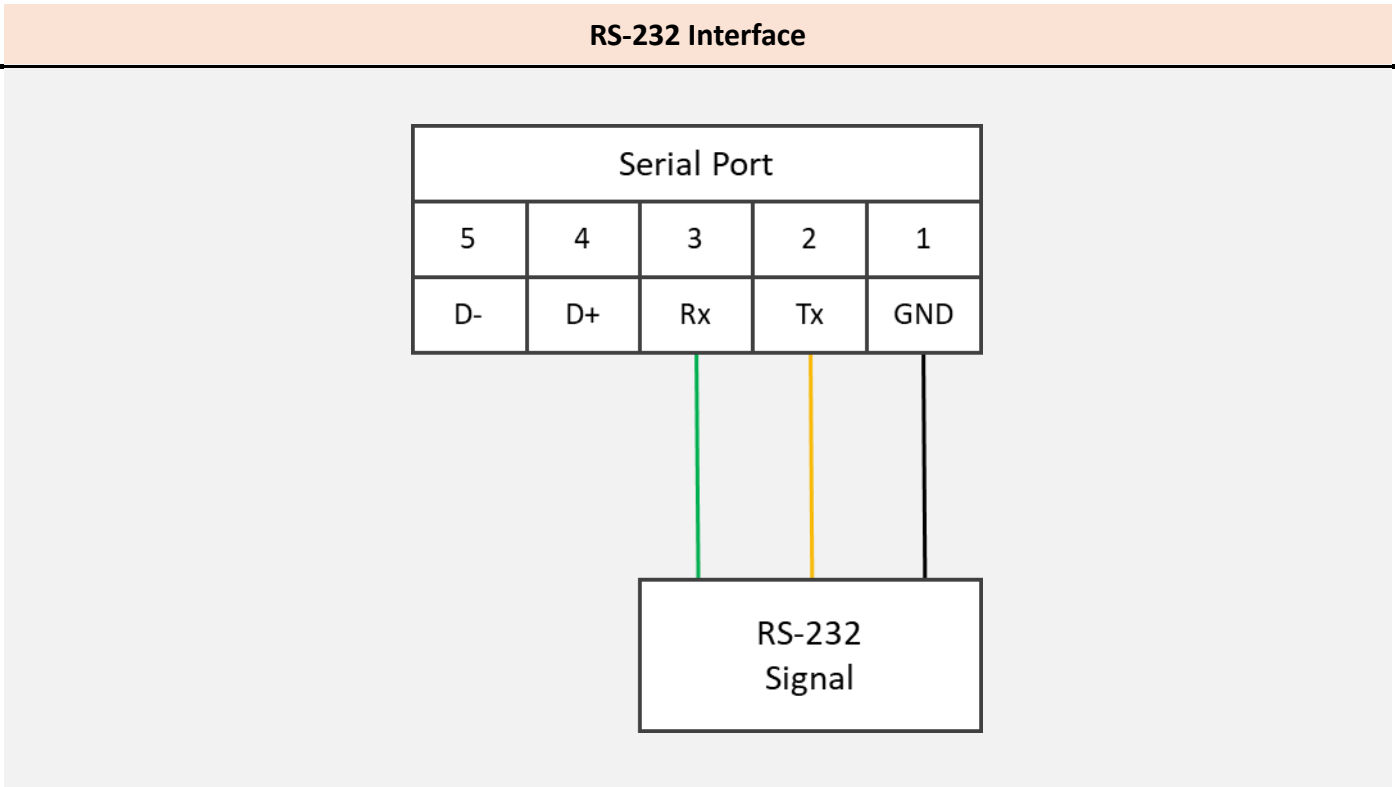
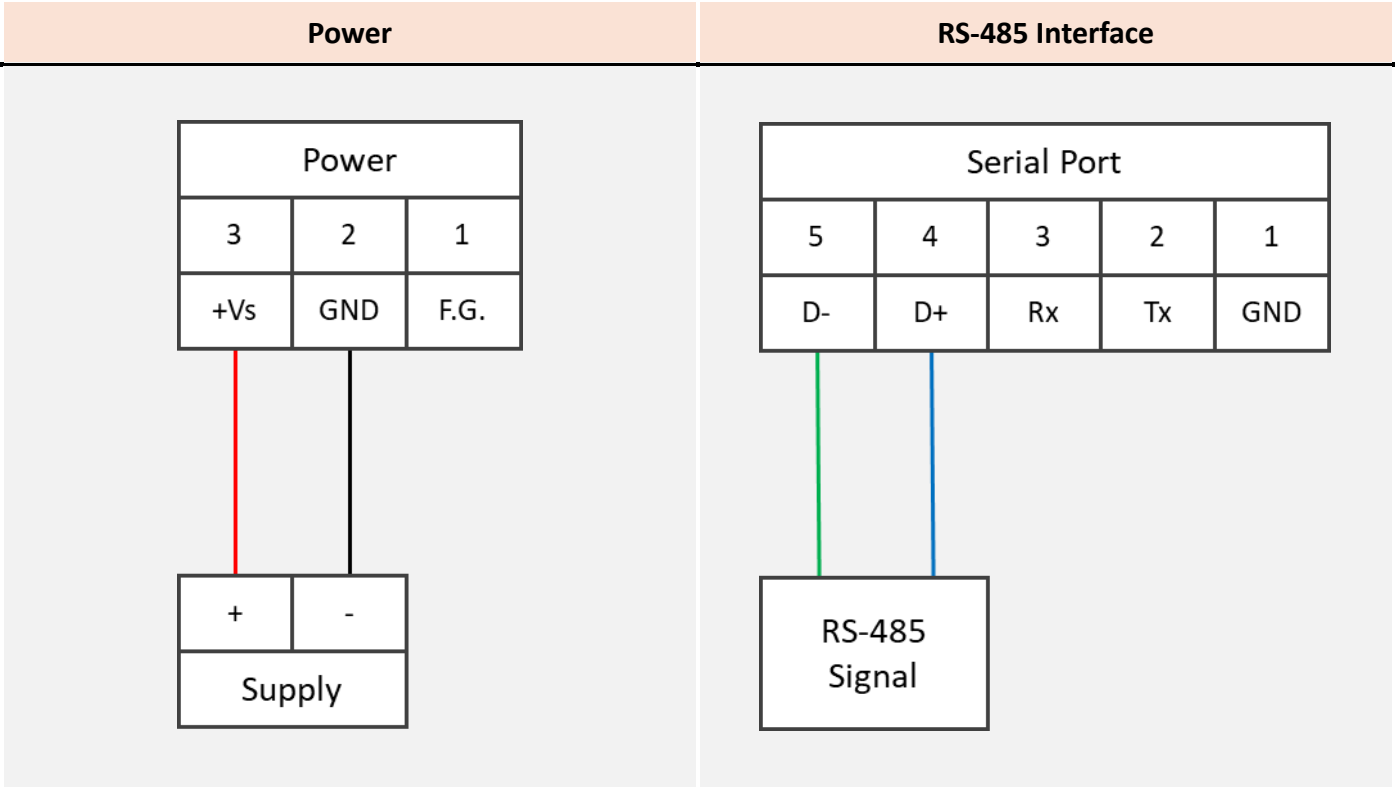
Environment

Operating Temperature	-25°C to 75 °C
Storage Temperature	-30°C to 85 °C
Humidity	10% to 95% RH, Non-condensing

Internal I/O Structure

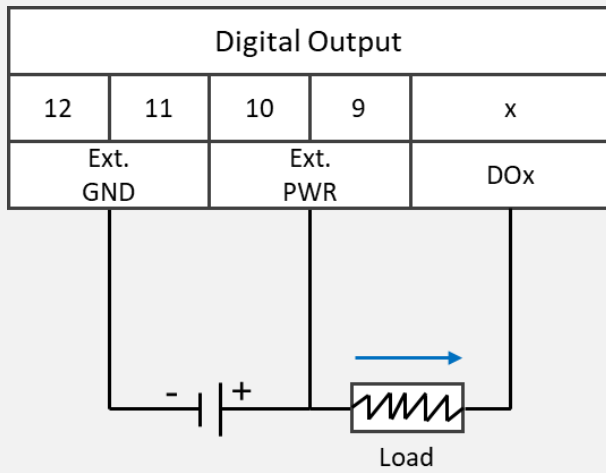


■ Terminal Assignments

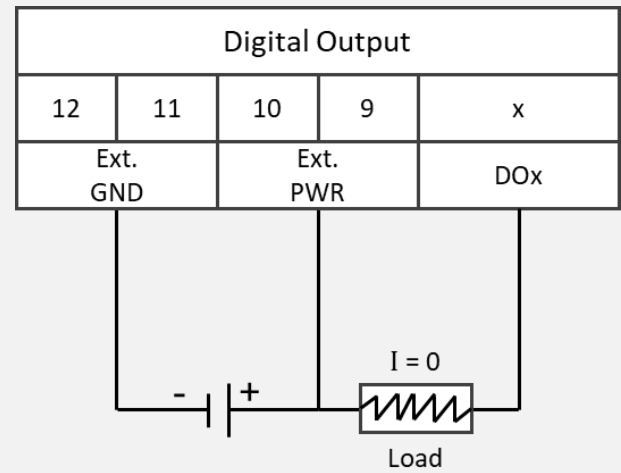


Digital Output

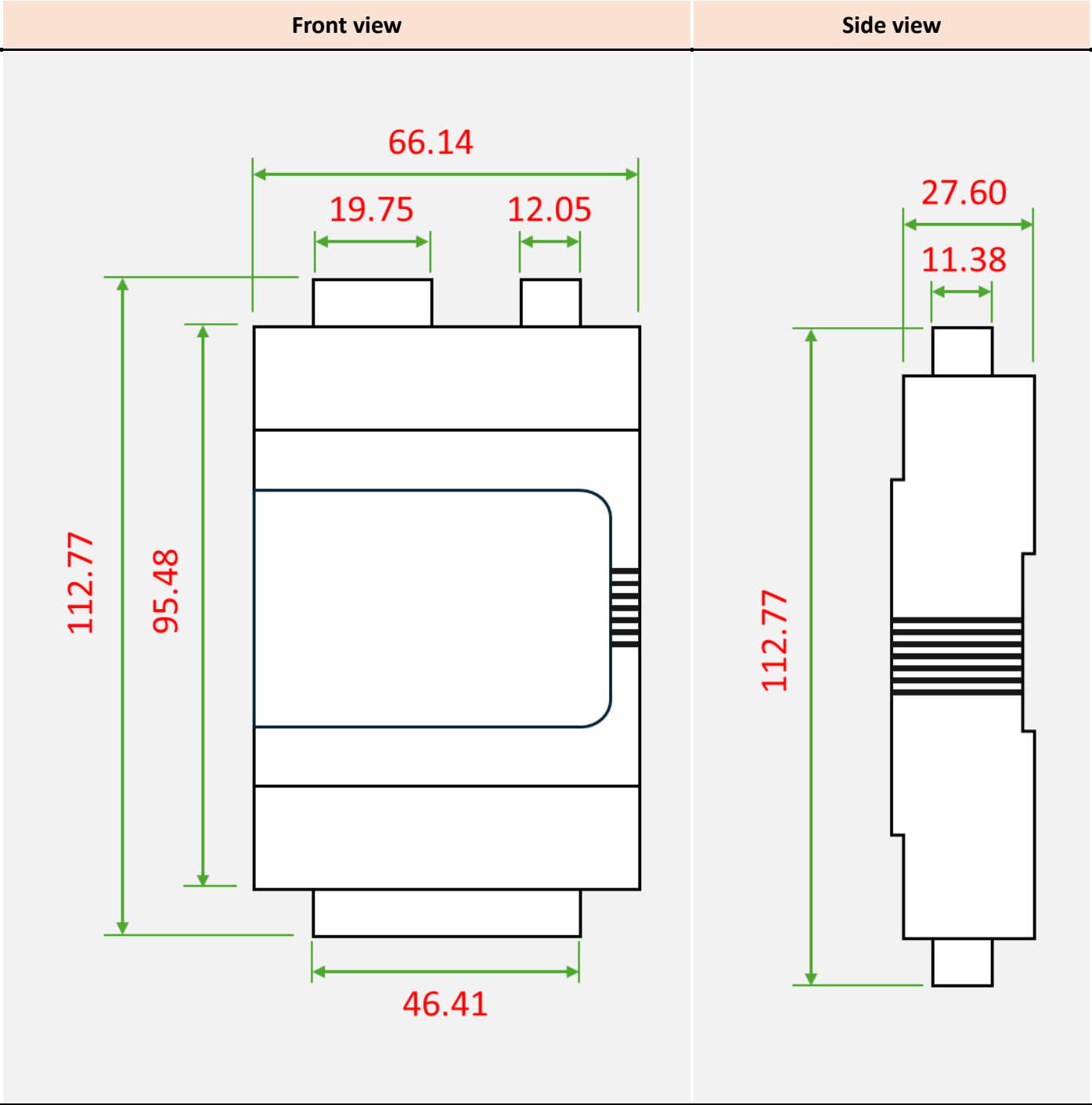
ON



OFF



■ Dimensions



Unit: mm

■ Appendix



全智升科技股份有限公司



+886-3-582-8498



SALES@ai-up.com.tw



<https://www.AI-UP.com.tw>



Rm. 424, Building 52, No. 195, Section 4,
Zhongxing Road, Zhudong Township,
Hsinchu County 310, Taiwan