

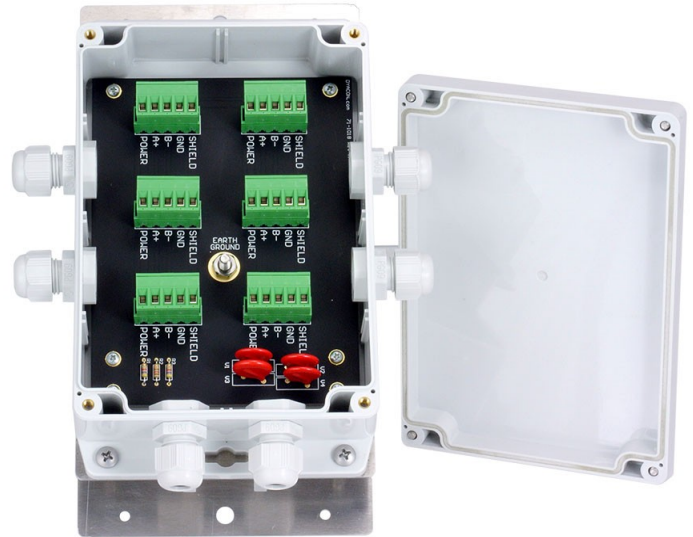
Modbus Junction Box MJB-1TM

For Modbus RS-485 (ASCII or RTU)

DATA SHEET

FEATURE SUMMARY

- Pull and termination resistors
- Pluggable terminal blocks
- Transient voltage protection
- Made in USA.



DESCRIPTION

Dyacon Modbus Junction Box MJB-1TM provides a convenient method to expand sensor capacity for Dyacon weather station controllers or to simplify installations.

MJB-1TM can also be used with other RS-485 networks.

MJB-1TM is a passive junction box that provides parallel connections for five slave devices and one master. Data and power are connected in parallel. Biasing, termination, and transient protection are included.

KEY FEATURES

Construction: Fully potted circuitry.

Connection: 5.08 mm pitch pluggable terminal blocks with screw clamp.

Pass-through supply voltage for 12 V and 24 V versions.

Pass-through data.

Mounting: Pole or flat surface.

APPLICATION

Modbus Junction Box MJB-1TM is typically used two different situations.

1) Indoor or remote weather station controller.

In this configuration, the junction box is mounted on the same structure as the sensors. All of the sensors connect to the junction box. A single cable is then routed to the Dyacon CM-1 weather station controller which may be located in a protected environment.

2) Sensor expansion.

Dyacon digital sensors are Modbus RTU slave devices. The Dyacon CM-1 only has two Modbus ports, but can address and read more. MJB-1 can be used to connect up to five Dyacon digital sensors.

ELECTRICAL

Power Input	5 VDC to 24 VDC
Current	Passive load and varistor leakage. 1.7 μ A at 12 VDC, 0.75 mA at 24 VDC
Circuit Protection	Varistor transient suppression for power and data.
Termination	Bias and load resistors optimized for 5 V. 4.7 k Ω – 120 Ω – 4.7 k Ω

ENVIRONMENTAL

Operating Temperature	-40°C to 80°C
Storage Temperature	-40°C to 80°C
Humidity	0% to 99%, non-condensing

MECHANICAL

Material	Polycarbonate enclosure, Polyamide 6.6 connector bodies
Overall (WxDxH)	24 cm x 12 cm x 8 cm (9.4" x 4.7" x 3.2")
Total Weight	.6 kg (1.3 lb)
Cable Gland	Polyamide material. PG 9 thread. 1.5 mm to 6 mm (0.22") clamping range.

DATA

RS-485	Half-duplex, parallel-connection pass-through. No active circuitry.
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COMPATIBILITY

Dyacon Controllers	CM-1
Dyacon Sensors	WSD-1, TPH-1, GT-1, LD-1, PM-1

