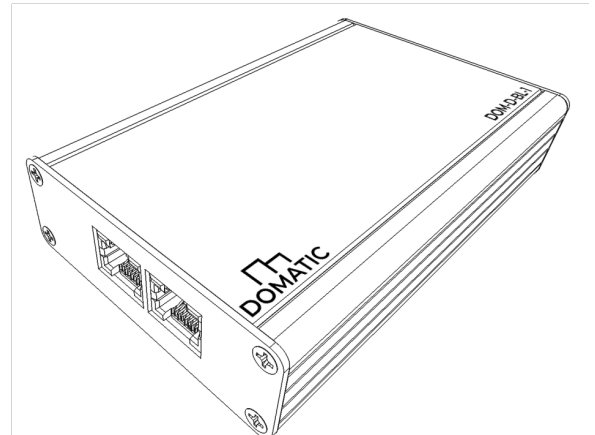


# RS485 Shade Driver

DOM-D-BL-1 | 2× Shade Motors | 24 VDC + RS485 | Domatic Bus

The RS485 Shade Driver connects up to two motorized window shades to the Domatic Bus. It supplies 24 VDC power and an RS485 serial control channel to compatible shade motors over a single RJ45 cable per motor – bringing roller, drape, and architectural shades onto the same network as everything else in the building.

Per-shade behavior – open / close / preset positions, scenes, schedules – is configured in software via the Domatic PowerHub.



## Key Features

- ✓ Drives up to 2 motorized shades from a single Domatic Bus connection
- ✓ 24 VDC motor power and RS485 serial control on a single RJ45 cable per motor
- ✓ Native Domatic Bus interface – power, control, and reporting on a single 2-wire CL2 input
- ✓ Position control, presets, scenes, and schedules configured in software via the PowerHub
- ✓ Compatible with Legrand (QMotion), Somfy Sonesse 30, and Somfy Sonesse 40 shade motors today; protocol support extensible via PowerHub firmware

## Supported Shade Motors

Manufacturer	Model / Family	Notes
Legrand	QMotion shades	24 VDC, RS485
Somfy	Sonesse 30	24 VDC, RS485
Somfy	Sonesse 40	24 VDC, RS485

**Note** This list reflects shade motors supported today. Additional 24 VDC / RS485 motors can be added through PowerHub firmware updates as their protocols are integrated – no hardware change is required.

## Electrical Specifications

### Input – Domatic Bus

<b>Input Voltage</b>	Nominal 48 VDC (Domatic Bus)
<b>Communication</b>	Domatic Bus (IEEE 1901 HD-PLC over the same 2-wire pair as power)
<b>Power Source</b>	Domatic PowerHub output port
<b>Max Input Power</b>	TBD

## Output – Shade Motor Ports









Ports	2× RJ45
Output Voltage	24 VDC to the motor
Control Channel	RS485 serial
Max Current per Port	TBD
Max Cable Length	TBD

## I/O Configuration

I/O	Connector	Description
Domatic Bus Input	Molex Mini-Fit, 2-pin	48 VDC and Domatic Bus protocol on the same pair. Mates with PowerHub output ports.
Shade Motor Port 1	RJ45	24 VDC power and RS485 control to one shade motor.
Shade Motor Port 2	RJ45	24 VDC power and RS485 control to one shade motor.

## Shade Motor Port Pinout (RJ45)

The shade-motor RJ45 ports follow the standard T568 wire-color order so they can be assembled with off-the-shelf Cat5/6 cable and tooling. Three conductors are paralleled for +24 VDC power and three for ground; RS485 A/B uses the remaining pair.

Pin	Wire Color	Signal
1	 White / Orange	RS485 A+
2	 Orange	RS485 B-
3	 White / Green	+24 VDC
4	 Blue	+24 VDC
5	 White / Blue	+24 VDC
6	 Green	GND
7	 White / Brown	GND
8	 Brown	GND

**Caution** The RJ45 pinout uses standard T568 wire colors but carries 24 VDC and RS485 – **not** Ethernet. Do not connect to standard Ethernet equipment.

## PowerHub Integration

Controller	Domatic PowerHub (required)
Configuration	Per-port motor type, presets, scenes, schedules – software-configurable via the PowerHub
Reporting	Per-shade position and motion state reported to the PowerHub
Protocol Support	Motor protocols are implemented in PowerHub firmware; new motor families can be added without changing hardware

## Mechanical Specifications

Dimensions	TBD
Weight	TBD
Enclosure Material	TBD
Mounting	TBD

## Environmental Specifications

Operating Temperature	TBD
Humidity	TBD
Installation	Indoor only (assumed – confirm)

## Standards & Compliance

Safety	TBD
Power Source	NEC Class 2 from the PowerHub output
Output	24 VDC, RS485

## Ordering Information

Model Number	Description
DOM-D-BL-1	Shade Driver – 2× shade motors, 24 VDC + RS485, Domatic Bus