RS485 RTS WIRELESS MOTOR CONTROLLER

RS485RTS transmitter
Surface or DIN rail mounting wireless motor controller
Accessories: Aerial extension kit (PN 9015314)

PN 1810803

Functional description

The Somfy RS485RTS wireless transmitter enables third party control systems to operate Somfy RTS* motorised solar shading devices via commands sent over an RS485 bus or via the integrated 5 dry contact input ports.

A single RS485RTS tranmitter manages 16 groups of up to 10 motorised shading devices each. Supported functions include: open, close, stop, go/record/delete a preset position, sun protection and tilting (specially suitable for venetian blinds).

This controller can be seamessly integrated into any control system available, including Control4, Crestron, HAI, BitWise, AMX, Elan g! and any other with RS485 or RS232 dedicated serial ports.

INPUTS

Power

Mains nominal values	230V AC / 50Hz – 60Hz
Connector	2x0.75 mm² mains 1.5m lead IEC C8 connector.

Dry contact control inputs

Number of dry contact input ports	5
Connectors	5x 3pin phoenix 3.5mm connector (included)
Recommended cable section	Min: 3x 0.8mm² Max: 3x 2.5mm²
Maximum cable length	100m

RS485 control bus

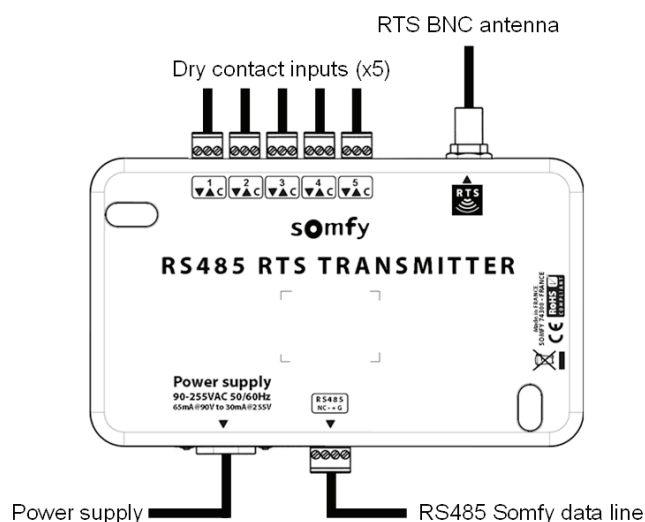|		
Connector type	1x 4 pin phoenix 3.5mm connector (included)	
Wiring	(+)	Inverting RS485 pin
	(–)	Non-inverting RS485 pin
	(GND)	Ground
Recommended cable	2x twisted pairs 24 AWG 120Ω shielded. PVC outer jacket.	
Maximum cable length	1000m	
Max. number of supported devices per bus line	100	

Physical characteristics

Dimensions	175 x 100 x 46 mm
Dimmensions (aerial extended)	253 x 100 x 46 mm
Enclosure material	ABS / Black

OUTPUTS

Radio

Protocol / Frequency	RTS U80 / 433.42MHz
Range	20m indoors / 200m outdoors in line of sight
Supported motors	Battery operated, 24 V DC and 230V AC Somfy RTS motors
Max. number of motors	160
Max. number of motor groups	10

INPUTS / OUTPUTS LAYOUT

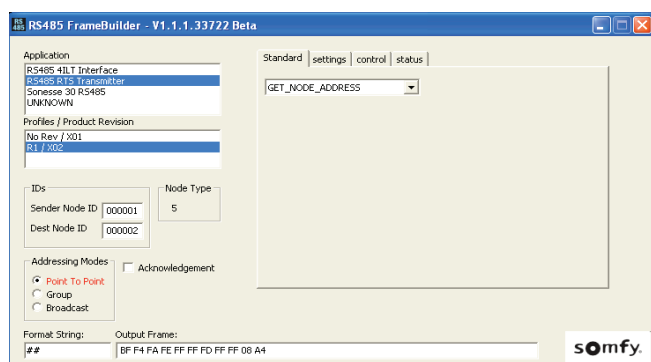
*RTS: radio technology Somfy

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INTEGRATION SUPPORT TOOLS

SOMFY FRAME BUILDER SOFTWARE

Most control systems have drivers available to facilitate the integration of the RS485RTS transmitter. Contact your official distributor for further information.

For those systems for which a driver is not currently available, Somfy's Framebuilder free tool generates the control frames to fully operate the unit from the RS485 bus. Framebuilder is available to download from www.somfysmarthome.co.uk

- Supported Somfy devices: RS485RTS transmitter, Sonesse® RS485 motor range.
- Addressing modes: point to point, group broadcast.
- Supported messages: standard, settings, control and status.
- Runs on Windows XP SP3.

SOMFY RS485 OPEN PROTOCOL

A full description of the protocol is available to download from www.somfysmarthome.co.uk

- Fully compliant with TIA–RS485–A standard.
- Half duplex.
- Device identification (node ID): see label on supported product.
- Acknowledgement request supported.
- Output control frames format*: 11 to 32 hexadecimal bytes.

RS485 character coding	
Baud rate	4800
Start / Stop bits	Logical level 0 / Logical level 1
Data bits	8 (LSB transmitted first)
Parity	Odd
Control commands	Refer to Somfy RS485 profile documentation

*Actual values sent over the bus are those of the bit inverted frames generated by Framebuilder.

RS485RTS TRANSMITTER TECHNICAL SPECIFICATIONS

Supply voltage	Nominal voltage values	90V AC – 255V AC
	Frequency	50Hz – 60Hz
	Electrical protection	Class II Product. No earth connection required
	Max. power consumption	65mA @ 90V AC to 30mA @ 255V AC
Radio	Protocol	RTS U80
	Frequency band	433.42 MHz
Connections	RS485	1x 4 pin 3.5mm phoenix connector (included)
	Dry contact inputs	5x 3pin 3.5mm phoenix connector (included)
	Aerial	1x BNC connector
	Mains	IEC C8
Temperature ranges	Operating	0ºC to +60ºC
	Storage	–30ºC to +80ºC
Weight	430g (including aerial and power supply lead)	
Compliances	CE	RoHS
Aerial extension kit (PN 9015314)	BNC 2m coaxial lead and fixing bracket. Extends radio signal range when the RS485 transmitter is installed in an electrical cabinet.	

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