RS485 RTS Transmitter

























With the new Somfy RTS motor controller, you can manage any Somfy applications from third party home automation systems for centralized control.





RS485 RTS TRANSMITTER

Functions

• Control the whole range of Somfy RTS products

















Roman & pleated shades

Curtains

Venetian blinds

Roller shad

Lights

Roller shutters

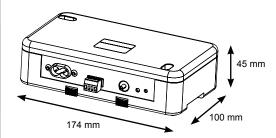
projector lifts

Projection screens

- Control up to 16 groups of products, RTS motors and receivers
- Can be controlled via:
 - RS485 (1)
- Dry contact / relays

Technical specifications

Supply (Nominal / Frequency)	From 90V to 255V AC - 50/60 Hz	
Amps	65 mA at 90V	
	30 mA at 255V	
Power consumption	3 W max.	
RTS transmitter	433 MHz	447 MHz
	20m between two concrete walls	
Connection	RS485: 1 detachable terminal block (4 pin 3.5mm)	
	Dry contact: 5 detachable terminal blocks (3 pin 3.5mm)	
	External mobile antenna – BNC COAXIAL	
	Power supply: Included 2m cable	
Mounting	Wall mounting	
	DIN rail mounting	
Environment	Temperature: from 0°C to 60°C	
	IP20	
C ← RoHS compliant		
Optional accessories	COAX BNC cable for RTS antenna (ref: 9 015 314)	



Wiring



Photos : Somfy - SOMFY SAS, capital 20.000.000 euros, RCS Annecy 303.970.230 ∙ ©SOMFY.COM091000

 $^{^{} ext{(1)}}$ The interface has its own network @



TECHNICAL DATA SHEET

Designation	RS485 RTS TRANSMITTER	
Reference	1810803	

FUNCTIONS

The RS485 RTS Transmitter is a motor controller for RTS motors and receivers.

It converts RS485 Somfy commands, coming from home control systems, into RTS orders.

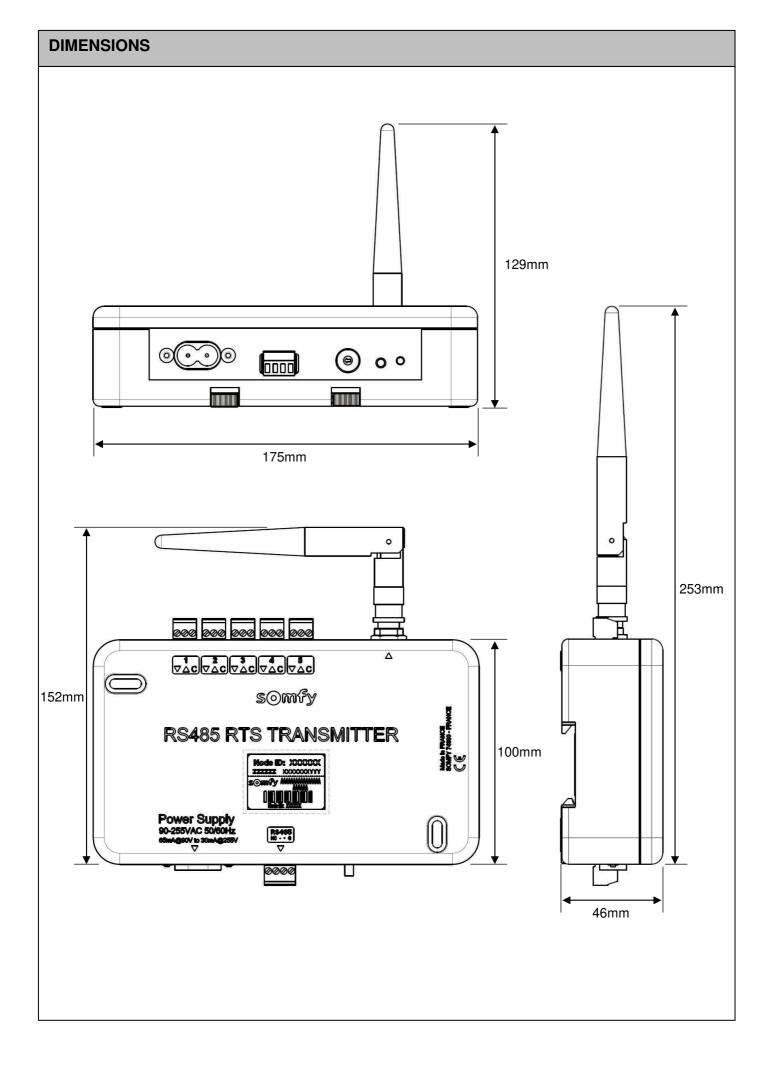
Up to 16 RTS addresses: the interface can manage up to 16 groups of RTS products from the RS485 network and from dry contact inputs (x5). Each group can control several motors/receivers.

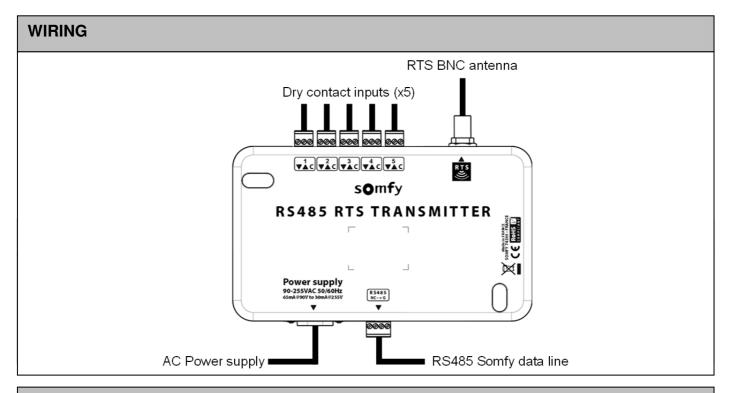
Functions with RTS motors/receivers: open, close, stop, go/record/delete a favourite position, activate/deactivate the sun protection, open the programming mode, tilt up and down.

Functions with RTS lighting receivers: ON, OFF, go/record/delete a favourite light level, open the programming mode, dim up and down.

The RS485 RTS Transmitter can not set motors (end-limits).

TECHNICAL SPECIFICATIONS		
Box	Material	ABS
	Color	Black
	Size	175 x 100 x 46 mm
	Protection factor against solid & splashproof	IP 20
Supply (universal)	Nominal (= limits)	90-255 V
	Frequency	50-60 Hz
	Electrical protection	Class II product
	Consumption (max.)	65mA @ 90V to 30mA @ 255V
Radio	Protocole	RTS U80
	Frequency	433,42MHz
Temperature range	Storing	-30℃/+80℃
	Working	0℃/+60℃
Connection	Dry contact	5 x Phoenix Contact connector block 3,5mm 3-pins
	RS485	1 x Phoenix Contact connector block 3,5mm 4-pins
	Antenna	1 x BNC connector
	Power supply	IEC C8
Network		Somfy RS485 Protocol
Weight		430 g (with antenna and power supply cable)
Marking		CE, RoHS compliant,





DATA LINE COMMANDS

Overview

The following paragraph describes the RS485 protocol of SOMFY, which is used to communicate with the RS485 RTS TRANSMITTER.

The RS485 protocol supports bi-directional communication between a host and the interface.

The term «Host» refers to the device initiating communication with the interface, usually a computer-based system.

RS485 communication standard

All signals on the physical link between devices should comply with EIA/TIA-485-A standard.

Recommended cable: Shielded, two twisted-pair type 22 - 24 AWG (120 Ω).

Communication mode: half-duplex. Between two messages, leave 100 ms approx.

Each character is coded as follow:

Character coding			
Baud Rate	4800	+/-2%	
Start bit	Logical Level 0		
Data bits	8	Less significant bit transmitted first	
Parity	Odd		
Stop bit	Logical Level 1		

Warning: Data bits shall be inverted

Message format

See the installation guide.

Message table

See the installation guide.

Development & Engineering	Quality	Business Unit

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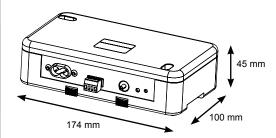
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