

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.

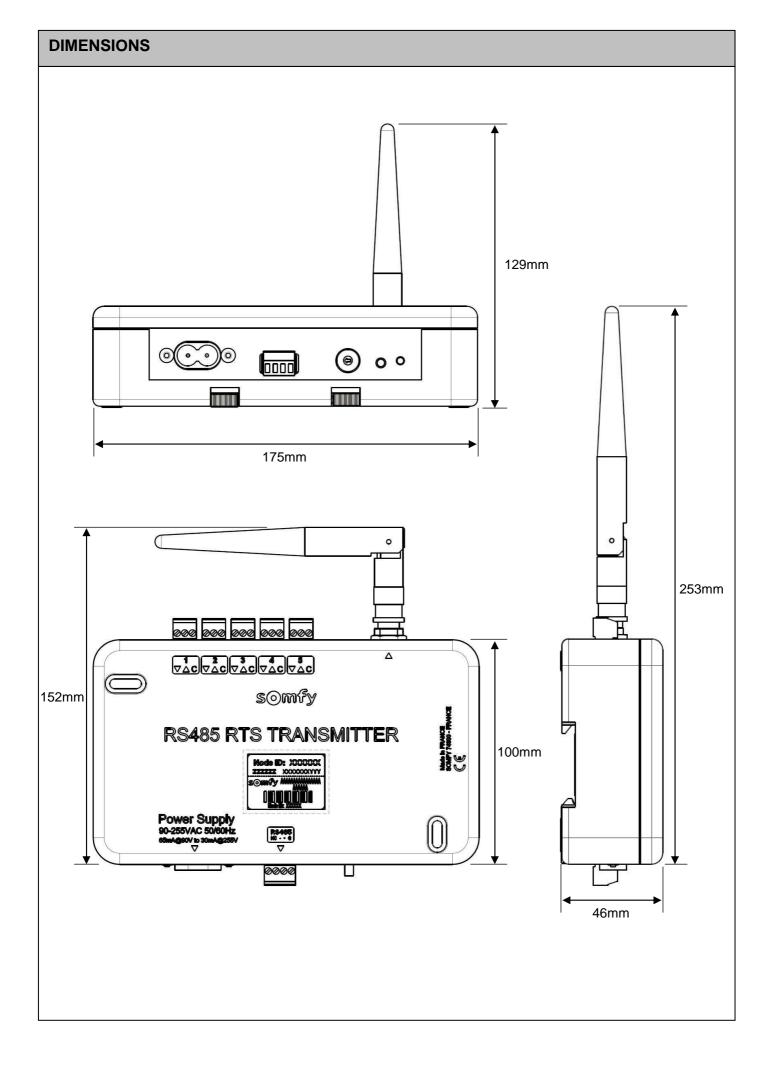
Up to 16 RTS addresses: the interface can manage up to 16 groups of RTS products from the RS485 network and from dry contact inputs (x5). Each group can control several motors/receivers.

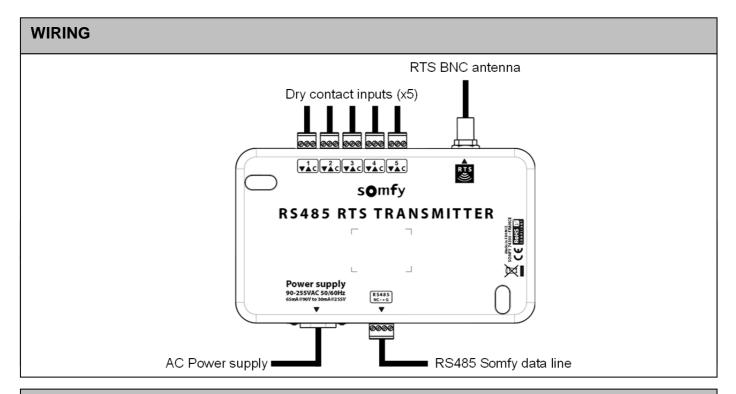
Functions with RTS motors/receivers: open, close, stop, go/record/delete a favourite position, activate/deactivate the sun protection, open the programming mode, tilt up and down.

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