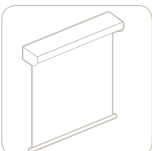
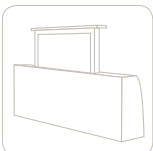
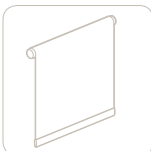
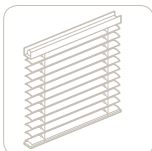


# RS485 RTS transmitter

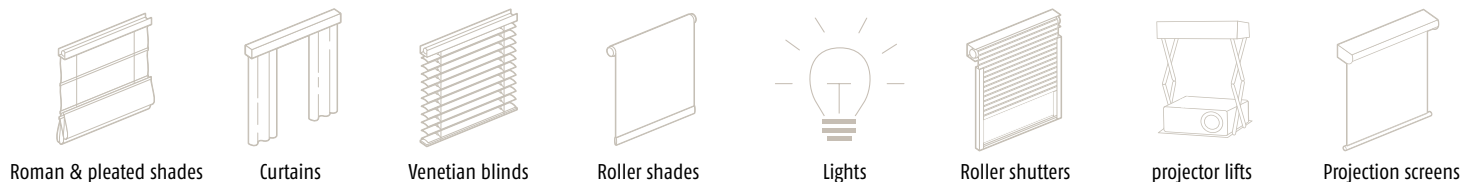


With the new Somfy RTS motor controller, you can manage any Somfy applications from third party home automation systems for centralized control.

# RS485 RTS TRANSMITTER

## Functions

- Control the whole range of Somfy RTS products

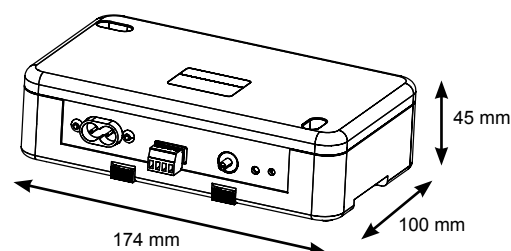


- Control up to 16 groups of products, RTS motors and receivers
- Can be controlled via:
  - RS485 <sup>(1)</sup>
  - Dry contact / relays

<sup>(1)</sup>The interface has its own network @

## 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                                                    |         |
| CE – RoHS compliant          |                                                         |         |
| Optional accessories         | COAX BNC cable for RTS antenna (ref: 9 015 314)         |         |



## Wiring





somfy®

# TECHNICAL DATA SHEET

23 - 10 - 2009

SDEV-FICA 33 R0

|             |                       |
|-------------|-----------------------|
| 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.

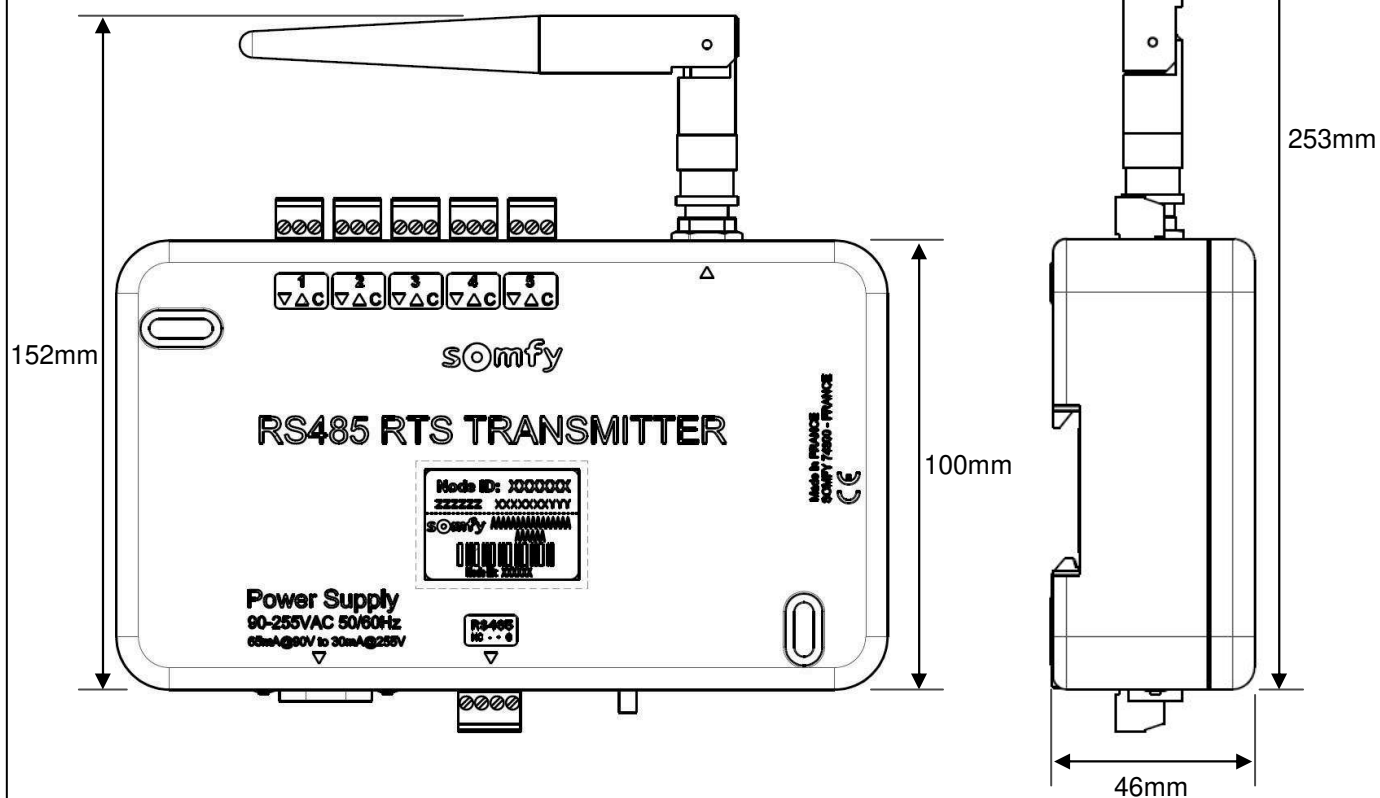
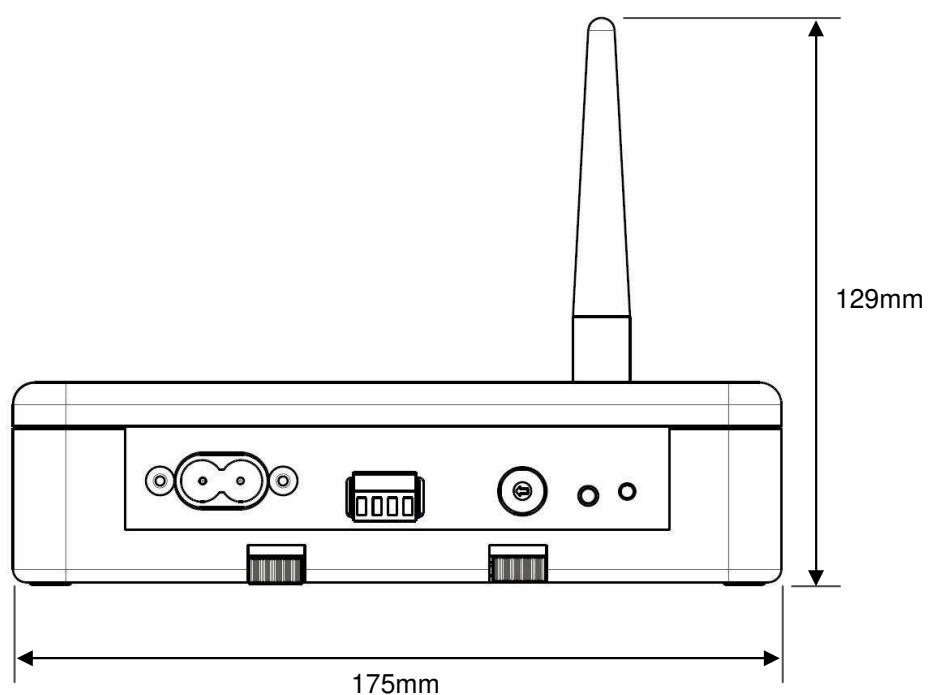
The **RS485 RTS Transmitter** can not set motors (end-limits).



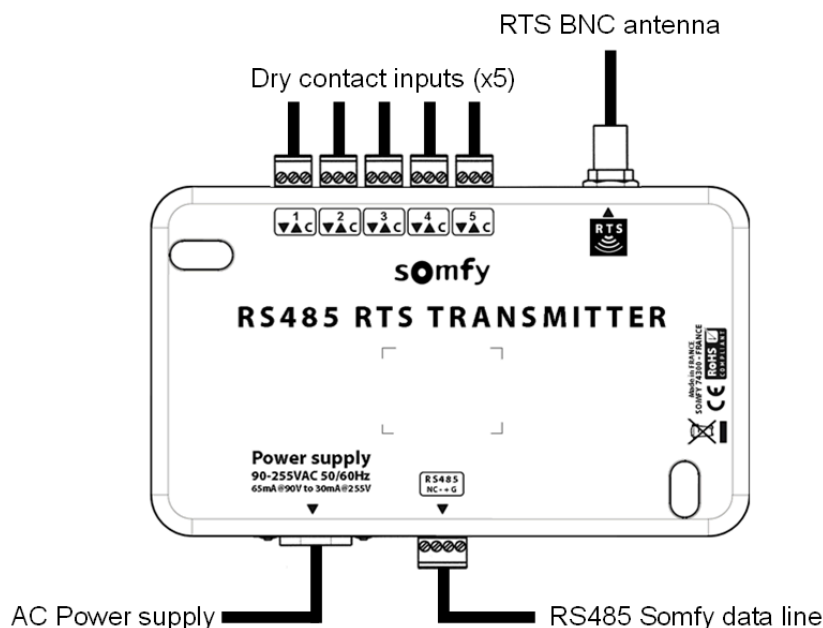
## TECHNICAL SPECIFICATIONS

|                    |                                                                                                           |                                                  |
|--------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 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 @ 255 V                       |
| Radio              | Protocole                                                                                                 | RTS U80                                          |
|                    | Frequency                                                                                                 | 433,42MHz                                        |
| Temperature range  | Storing                                                                                                   | -30 °C / + 80 °C                                 |
|                    | Working                                                                                                   | 0 °C / + 60 °C                                   |
| 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,  |                                                  |

## DIMENSIONS



## WIRING



## 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  $\Omega$ ).

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.

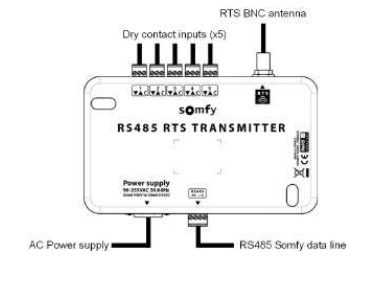
Development & Engineering

Quality

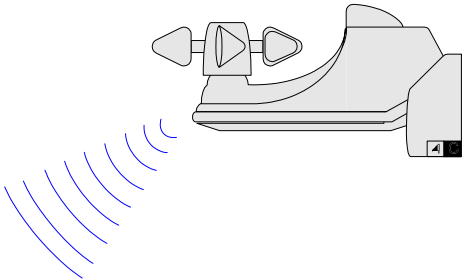
Business Unit

4.6c RS485 TRANSMITTER - WIRING

HOME AUTOMATION



RS485 TRANSMITTER  
COMMUNICATES  
WIRELESSLY WITH  
RTS RECEIVER



EOLIS RTS WIND SENSOR  
REQUIRES 240V POWER  
ACTIVE & NEUTRAL

WIRELESS COMMUNICATION  
BETWEEN RECEIVER AND  
WIND SENSOR

MAINS POWER IN  
ACTIVE  
NEUTRAL  
EARTH

4 CORE / TWIN ACTIVE  
CABLE LENGTH - 1500MM  
USE ONLY BROWN ACTIVE

MOULDED  
PLUG

WIRELES RTS  
RECEIVER

MOULDED  
PLUG

4 CORE / TWIN ACTIVE MOTOR CABLE  
CABLE LENGTH - 900MM

MOTOR

