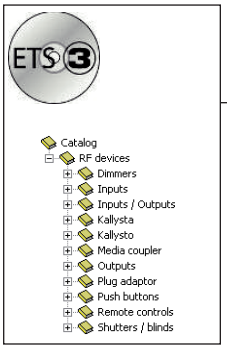
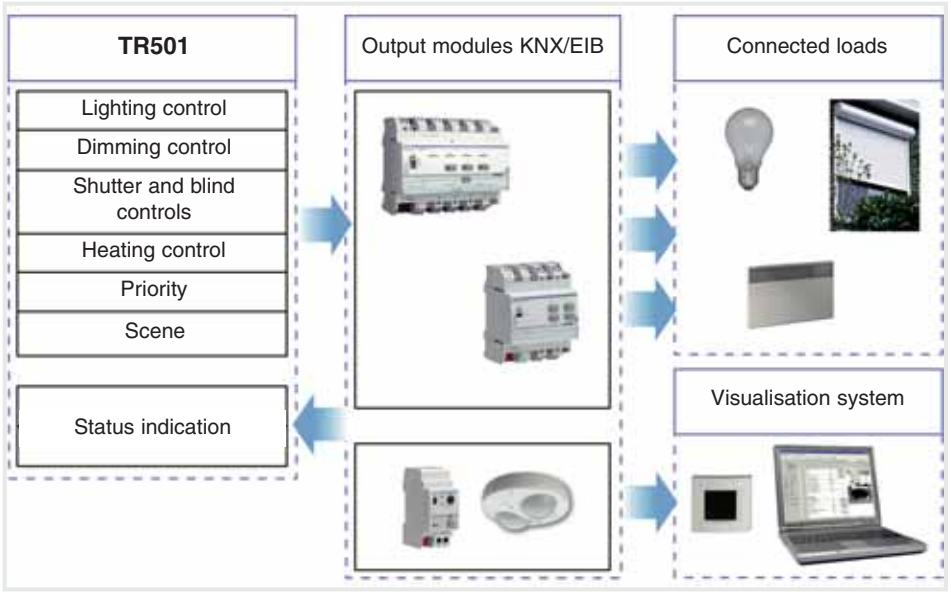
Tebis application software



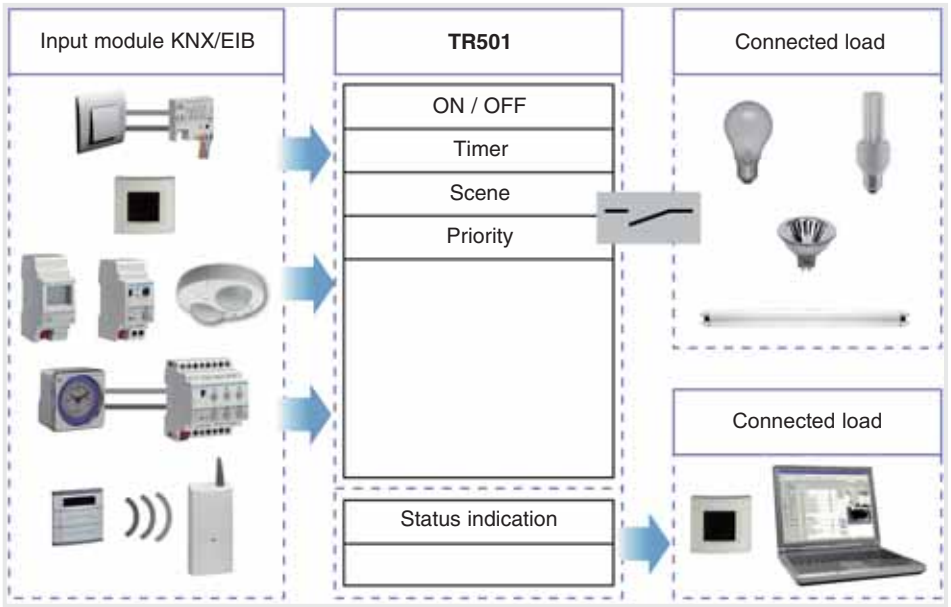
Input and output product descriptions RF

	Product reference	Description
	TR501	1-fold input/1 -fold output embedded RF

Input



Output



Contents

1. Description of the functions

The application software STR501 can be used to configure the product's input and output. The main functions are as follows:

1.1 Input

■ Emission of controls:

The push buttons can emit controls for lighting, shutters and blinds, heating settings and scenes.

Emission of controls:

➡ Lighting control
Toggle switch, ON, OFF, ON/OFF, Timer, Priority
1 or 2-button dimmer.

➡ Shutter/blind control
Up, Down, Stop, Angle of the Blind Slats, Priority, Wind Alarm, Rain Alarm
1 or 2-button control

➡ Set point selection (Thermostat)
Comfort, Eco, Comfort/Eco, Frost protection, Priority

■ Scene

The Scene function emits a group of controls to various types of output to create the desired room conditions or scenarios. Example of Scene 1: Leaving the dwelling (central lighting control OFF, shutters on the south side lowered to 3/4, other shutters open, heating shifted to Eco mode).

■ Priority

The priority function allows an input to be forced into a state defined as ON or OFF.
The action of the priority function depends on the application type controlled: lighting, shutter or heating.

■ Alarms

The alarm 1 and alarm 2 functions can emit alarms cyclically over the bus coming from the automatic controls (anemometer, rain detector, light sensitive switch, etc.). Alarm 1 has a higher priority than alarm 2.

1.2 Output

■ ON/OFF

The ON/OFF function allows a lighting circuit to be switched on or off.
The control may come from switches, push buttons or from the automatic controls.

■ Status indication

The status indication function reports the state of the output contact.
It enables a Function_Toggle switch to be realised, while returning the Status indication on each of the push buttons of the group.

■ Timer

The Timer function allows a lighting circuit to be switched on or off for a time period that can be set.
The output can be set to ON or OFF for a given time according to the timer operation selected. The timer can be interrupted before the end of the time delay. A configurable cut-OFF pre-warning signals the end of the time delay by inverting the status of the output for 1 second.

■ Priority

The Priority function allows an output to be forced into a state defined as ON or OFF.
This control has the highest priority. No other control is considered if a priority is active. Only a control for the end of priority can re-authorise the other controls.
Application: maintaining a light switched on for security reasons.

■ Scene

The Scene function allows a set of outputs to be regrouped. These outputs can be set to a predefined, configurable status.
A scene is activated by pressing on a single push button.
Each output can be included in 32 different scenes.

2. Configuration and parameter setting

2.1 Input

2.1.1 List of projects

Functions / Object	ON / OFF	Toggle switch	Timer	1-button dimmer	2-button dimmer	1-button shutters / blinds	2-button shutters / blinds	Heating	Scene
ON / OFF	X	X		X	X				
Status indication		X		X		X			
Timer			X						
Dimming				X	X				
Slat angle / Stop						X	X		
Up / Down						X	X		
Set point selection								X	
Scene									X
Priority	X						X	X	
Alarm 1							X		
Alarm 2							X		
Status battery	X	X	X	X	X	X	X	X	X

2.1.2 Setting the parameters

■ Parameter setting: Input channel function

The product can emit controls for lighting, shutters and blinds, heating settings and scenes.

➡ Parameter setting screen

Parameters	Description	Value
Channel function	This parameter allows the type of function associated with each input to be selected.	Factory settings Lighting, ON - Lighting, OFF - Lighting, Toggle switch - Lighting, Increase / Decrease - Lighting, Increase - Lighting, Decrease - Lighting, ON / OFF - Lighting, Timer - Lighting, Priority ON - Lighting, Priority OFF Shutters / blinds, Up / Down - Shutters / blinds, Up - Shutters / blinds, Down - Shutters / blinds, Up priority - Shutters / blinds, Down priority - Shutters / blinds, Alarm 1 - Shutters / blinds, Alarm 2 Heating, Comfort / Eco - Heating, Comfort - Heating, Eco - Heating, Frost protection - Heating, ON / OFF - Heating, Timer - Heating, Comfort priority - Heating, Priority frost protection Scenes 1-8 Default value: **Factory settings**

■ Channel function: Factory settings

This function is the function loaded in the products at the factory. It allows the product to be recognised by the TR351.

■ Channel function: Lighting, Toggle switch

This function allows control of the switching on or off of a lighting circuit or of any other load.
With each press on the push button the status of the output is inverted.
Description:
Following a press on the push button, depending on the **Status indication** object, an ON or OFF control will be emitted over the bus via the **ON / OFF** object.

■ Channel function: Lighting, ON / OFF - Lighting, ON - Lighting, OFF

These functions allow control of the switching on or off of a lighting circuit or of any other load.
The ON or OFF control is emitted over the Bus via the **ON / OFF** object. The control to be sent (ON or OFF) must be defined at the time of selecting the channel function:

➡ Lighting, ON / OFF: Emission of the ON control, on closure of the input contact or on pressing of the push button, and emission of the OFF control on the opening of the input contact or on release of the push button.

➡ Lighting, ON: Emission of the ON control, on closure of the input contact or on pressing of the push button.

➡ Lighting, OFF: Emission of the OFF control, on closure of the input contact or on pressing of the push button.

■ Channel function: Lighting, Increase / Decrease - Lighting, Increase - Lighting, Decrease

These functions allow a light to be dimmed from one or two push buttons.
The 1-button dimming and 2-button dimming functions emit the **ON/OFF** object after a short push.
A long push emits the **Dimming** object.

➡ Lighting, Increase / Decrease: Emission of the Increase or Decrease control, on closure of the input contact or on pressing the push button, as a function of the **Status indication** object.

➡ Lighting, Increase: Emission of the ON control, on closure of the input contact or on pressing of the push button.

➡ Lighting, Decrease: Emission of the OFF control, on closure of the input contact or on pressing of the push button.

■ Channel function: Shutters / blinds, Up / Down - Shutters / blinds, Up - Shutters / blinds, Down

➞ Shutters / blinds, Up / Down:
This function allows the shutters or blinds to be controlled with a single button (Input). The function switches after each push (Down, STOP, Up, STOP). Altering the angle of the slats is not possible.

➞ Shutters / blinds, Up:
This function allows the shutters or blinds to be controlled from two push buttons (Inputs).
Emission of the Up control, on closure of the input contact or on pressing the push button, and emission of the **Slat angle / Stop** object (short press).

➞ Shutters / blinds, Down:
This function allows the shutters or blinds to be controlled from two push buttons (Inputs).
Emission of the Down control, on closure of the input contact or on pressing the push button, and emission of the **Slat angle / Stop** object (short press).

■ Channel function: 1-button dimmer

This function allows the ON/OFF or Increase / Decrease controls to be effected on a single push button.
There are 2 different types of function: **1-button dimmer** or **2-button dimmer**.

■ Channel function: Shutters / blinds, Alarm 1 - Shutters / blinds, Alarm 2

These functions enable cyclic emitting of alarms from the automatic controls (anemometer, rain detector, light sensitive switch, etc.).
To set the shutters to the security position in the event of bad weather: linking the Alarm 1 and Alarm 2 functions to the **Alarm 1** and **Alarm 2** objects of the Shutters / blinds output modules.
These functions have the highest priority. (Alarm 1 has a higher priority than alarm 2)

■ Channel function: Heating, Comfort / Eco - Heating, Comfort - Heating, Eco - Heating, Frost protection

This function allows a heating setting to be selected.
The modes of this function are emitted via the **Set point selection** object.

■ Channel function: Heating ON / OFF: Emission of the OFF control, on closure of the input contact or on pressing of the push button, and emission of the ON control on the opening of the input contact or on release of the push button.

■ Channel function: Lighting, Priority ON - Lighting, Priority OFF - Shutters / blinds, Up priority - Shutters / blinds, Down priority - Heating, Comfort priority - Heating, Priority frost protection

This function allows the priority or cancellation of priority controls to be emitted.
No other control is considered if a priority is active. Only end-of-priority controls or alarms will be considered.
The value of the **Priority** object is defined at the time of selection of the Channel function.

■ Channel function: Scenes 1-8

The Scene function emits a group of controls to various types of output to create the desired room conditions or scenarios. (Panic switch, television, etc.).
The value of the **Scene** object is defined at the time of selection of the Channel function.

■ Channel function: Lighting, Timer - Heating, Timer

These functions are identical to a staircase timer.
The controls are emitted over the bus via the **Timer** object.
Special features:
Short press (rising edge): Timer start.
long press (falling edge): Timer end.

NB: The timer duration parameter is configured on the output module

2.2 Output

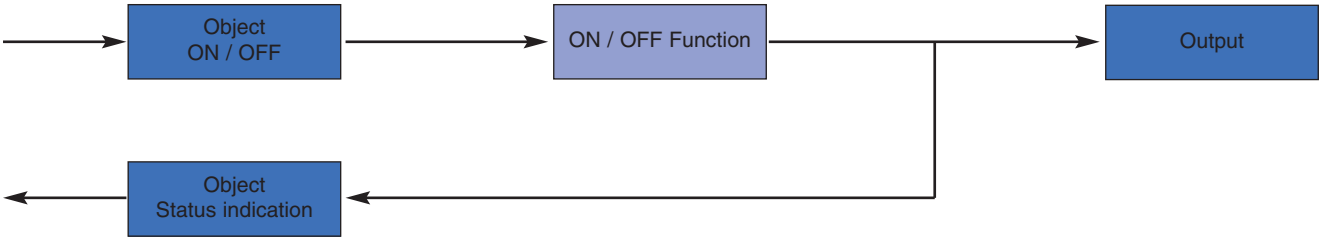
2.2.1 List of objects

Number	Name	Object Function	Length	Group Addresses	Description	C	R	W	T	U	Data Type	Priority
0	Output 1	ON / OFF	1 bit			C	R	W	-	-		Low
1	Output 1	Timer	1 bit			C	R	W	-	-		Low
2	Output 1	Priority	2 bit			C	R	W	-	-		Low
3	Output 1	Scene	1 Byte			C	R	W	-	-		Low
4	Output 1	Status indication	1 bit			C	R	-	T	U		Low
6	Input 1	ON / OFF	1 bit			C	R	-	T	-		Low

2.2.2 Setting the parameters

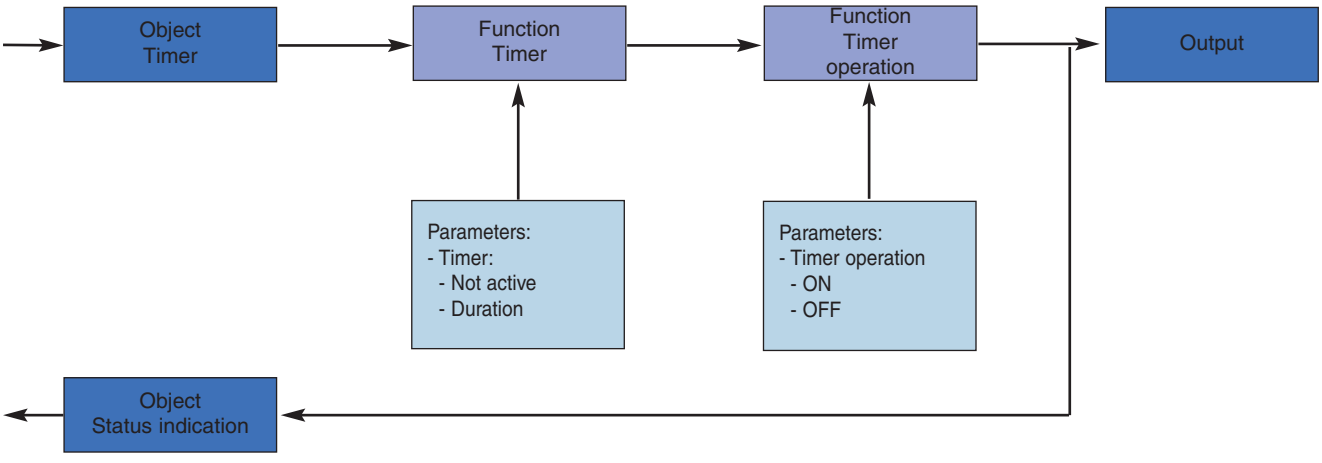
■ ON/OFF and Status indication functions

The ON/OFF function allows the output to be switched to ON or to OFF using the **ON/OFF** object. The status of the output depends on the activation of other functions and the associated parameters: priority, timer and scene.
The current state of the output is signalled over the bus by the **Status indication** object.



■ Timer Function

The Timer function allows a lighting circuit to be switched on or off for a time period that can be set. The function is started by the **Timer** object.

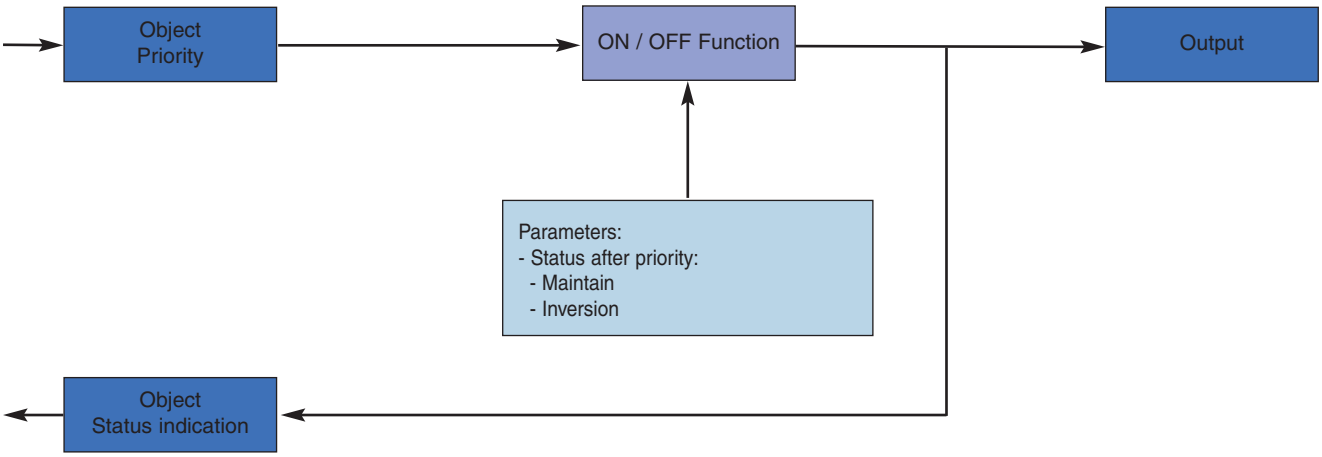


➡ Parameters:

Parameters	Description	Value
Timer	This parameter controls the duration of the time delay.	Not active, Range [0.5 s 24 h]* Default value : 3 min.
Timer operation	This parameter determines if the time delay engages an ON or OFF status.	ON / OFF Default value: ON.

■ Priority function

The priority function allows the outputs to be forced and maintained in a defined ON or OFF status imposed by the input. This function is started by the **Priority** object. The Priority function has the highest priority Only a Priority cancellation control can end the priority and re-authorise the consideration of controls coming from the bus.



➡ Description of the **Priority** object.

Value	Behaviour of the output
00	End of priority
01	End of priority
10	Priority OFF
11	Priority ON

➡ Parameters:

Parameters	Description	Value
Status after priority	This parameter defines the status of the output applied after the priority.	Maintain, Inversion - Maintain: maintains the output in the status which existed before the priority. - Inversion: Inversion of the output status with respect to that which existed during the priority (ON goes to OFF and OFF goes to ON). Default value: Maintain.

3. Main characteristics

Product	TR501
Maximum number of group addresses	32
Maximum number of associations	50
Parameters	5
Objects	6

4. Physical address

Physical addressing of the radio products is done from the plug-in of TR131. In the menu ‘’Physical addressing”, select ‘’Physical addressing”, then follow the instructions which appear on the screen.

Default input / output links exist in the products but are none the less invisible in ETS. To configure the product, proceed as if these links did not exist.

5. Return to factory settings

The return to the factory of the products is done from the plug-in of TR131.

■ If the product forms part of the installation (recognised by the TR131): In the menu ‘’Physical addressing”, select ‘’Return to factory settings”, then follow the instructions which appear on the screen.

■ If the product does not form part of the installation (unrecognised by the TR131): In the menu ‘’Physical addressing”, select ‘’Product outside installation”, select “Bi-directional product”, then follow the instructions which appear on the screen.