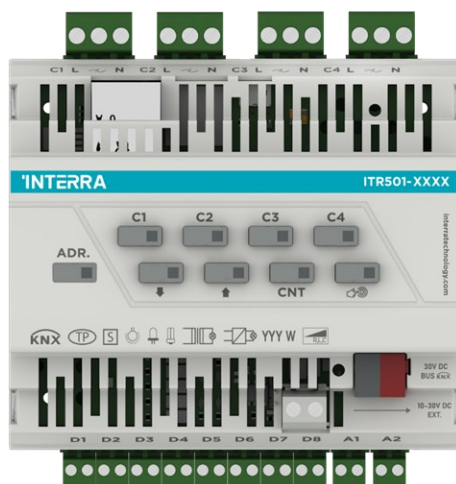


## Interra Universal Dimming Actuator



<b>Product Code</b>	ITR501-XXXX
<b>Power Supply</b>	Bus Power / External DC Power
<b>Operating Voltage</b>	230 V AC ±10%
<b>Operating Frequency</b>	50 Hz
<b>Mounting Type</b>	DIN Rail - 6 Modules
<b>Configuration Mode</b>	S-Mode
<b>Type of Protection</b>	IP 20
<b>Temperature Range</b>	Operation (-5°C...45°C) Storage (-25°C...55°C)
<b>Maximum Air Humidity</b>	< 90 RH
<b>Bus Connection</b>	1 x KNX, 1 x Ethernet,
<b>Colour</b>	Light Grey
<b>Dimensions</b>	105 x 90 x 64 mm (H x W x D)
<b>Certification</b>	KNX Certified
<b>Configuration</b>	Configuration with ETS

### DESCRIPTION

Interra ITR501-XXXX Universal Dimming Actuators can produce 300/250 W of output power per channel and drive R, L, and C loads. Temperature protection, short circuit protection, error notification via channel LEDs, load presence detection and load type detection features are available.

ITR501-X <sub>1</sub> X <sub>2</sub> X <sub>3</sub> X <sub>4</sub>		
<b>X<sub>1</sub></b>	Reserved	
<b>X<sub>2</sub></b>	0 : No Ethernet	1 : Ethernet
<b>X<sub>3</sub></b>	0 : No Inputs	1 : Inputs
<b>X<sub>4</sub></b>	2 : 2 Channels	4 : 4 Channels

Product Code	ITR501-XXX2	ITR501-XXX4
<b>Incandescent &amp; Halogen</b>	300 W (250 W inductive mode)	250 W (200 W inductive mode)
<b>Halogen LV (Ferromagnetic Transformer)</b>	250 VA (Capacitive mode not supported)	200 VA (Capacitive mode not supported)
<b>Halogen LV (Electronic Transformer)</b>	300 VA (Inductive mode not supported)	250 VA (Inductive mode not supported)
<b>Cable Cross Section</b>	<b>Single Cable:</b> 0.5 mm <sup>2</sup> - 2.5 mm <sup>2</sup> or 2 x 1.5 mm <sup>2</sup>	<b>Single Cable:</b> 0.5 mm <sup>2</sup> - 2.5 mm <sup>2</sup> or 2 x 1.5 mm <sup>2</sup>
	<b>Ferrule cable:</b> 0.5...2.5 mm <sup>2</sup>	<b>Ferrule cable:</b> 0.5...2.5 mm <sup>2</sup>
	<b>Without Ferrule:</b> 0.5...2.5 mm <sup>2</sup>	<b>Without Ferrule:</b> 0.5...2.5 mm <sup>2</sup>

### FUNCTIONS

- Programming of the device is also possible without applied 230 V supply voltage.
- Depending on the ETS configurations, automatic load recognition can be made.
- For dimming incandescent lamps, low voltage and high voltage halogen lamps, dimmable LED retrofit lamps and dimmable compact fluorescent lamps.
- The dim curve determination function can divide the dim curve into 5 zones, the dimming speed of each zone can be adjusted separately.
- In Universal Dimming Actuator devices, there is an RGB LED status indicator for each channel and manual control can be made on the device. Scenarios, forced operation, block, staircase, operating hours functions are available.
- Ability to work with 3-Phase systems with separated phase and neutral connection for each channel.
- Digital inputs can be used with dry contacts for channel control or sending telegrams to the bus.
- Analog inputs can be used with resistive sensors. (NTC, LDR)

### INSTALLATION STEPS

- Labeling for AC power wires, loads wires and KNX/EIB wire.
- Mount the device on a DIN rail of distribution box.
- Connect wires for loads.
- Make sure there is no short circuit or open circuit.
- Make sure the KNX cable type is correct and has no short circuit.
- Connect KNX cables. Make sure the color is correct.
- Organize all cables and make sure the KNX cable is not shorted to the AC power cable.

## DIMMABLE LOADS

ETS Parameter \ Load	Halogen, Incandescent Lamps	Ferromagnetic Transformer (Inductive)*	Electronic Transformer (Capacitive)*	LED (Retrofit), CFL
Automatic	✓	✓	✓	⊖
Capacitive (phase)	✓	✗	✓	✓
Inductive (phase)	✓	✓	⊖	✓

\* : LV halogen, 12V-LED

✓	Usage possible
⊖	Usage is not recommended
✗	Not possible to use

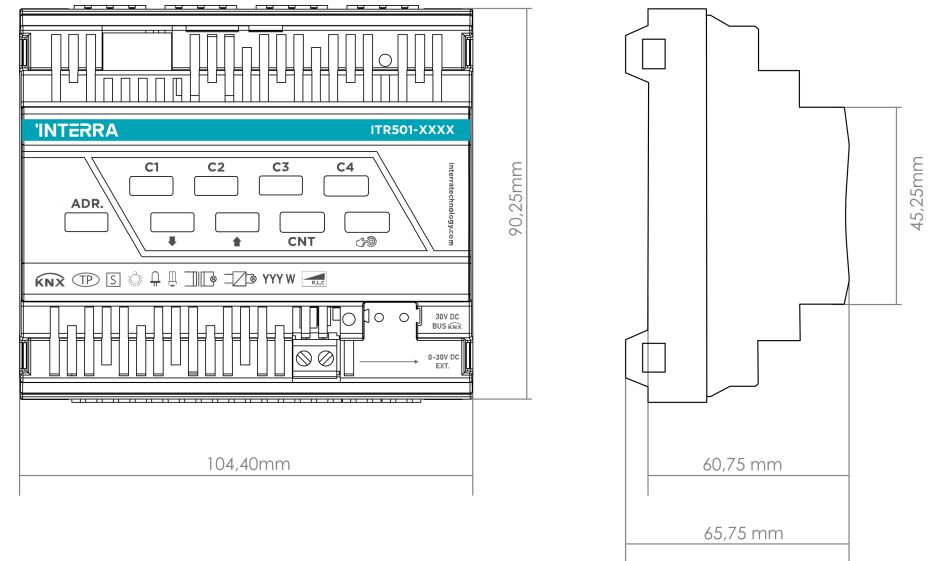
## IMPORTANT NOTES

- Special Programming – This device is designed for professional KNX installation. It can only be programmed by ETS software.
- Check Connections – Re-tighten all connections after installation.
- Do not connect channels in series.
- For parallel connection, choose parallel connection over ETS.
- The automatic load identification feature is not recommended for known load types. For better dimming performance, select the appropriate parameter for known load types.
- Output Circuit – The load on the switched circuits must not exceed the specified capacity of 10 A, these circuits should be fed via a 10 A fuse/circuit breaker.
- Screw down strength is less than 0.25 Nm.
- Rain, liquid and aggressive gas are not allowed to be close to device.
- Do not short AC mains voltage into Bus wire, it will damage all of devices in system.

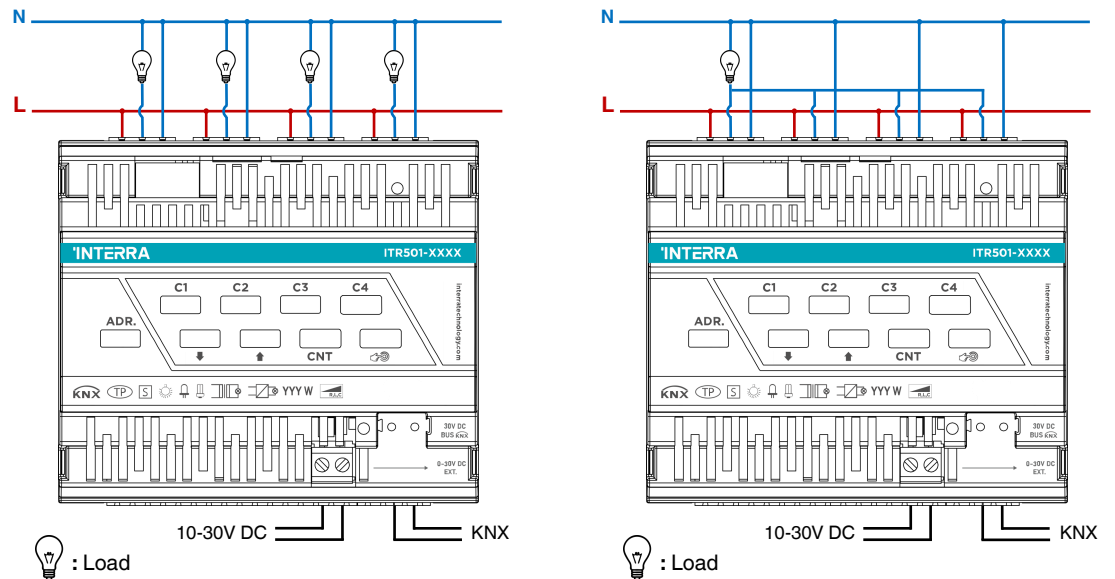
## ATTENTION! - RISK OF DAMAGING THE DEVICE

For parallel switching of channels, these must be connected to the same phase. In case of different phases, the dimmer will be damaged during parallel switching.

## DIMENSIONS



## CONNECTION DIAGRAMS



Individual Connection

Parallel Connection