INTERRA

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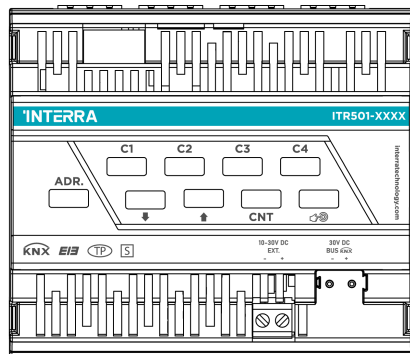
Product Code	ITR501-XXXX
Power Supply	Bus Power / External DC Power
Operating Voltage	230 V AC ±10%
Operating Frequency	50 Hz
Mounting Type	DIN Rail - 6 Modules
Configuration Mode	S-Mode
Type of Protection	IP 20
Temperature Range	Operation (-5°C...45°C)
	Storage (-25°C...55°C)
Maximum Air Humidity	<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

Product Code	ITR501-XXX2	ITR501-XXX4
Incandescent & Halogen	300 W (250 W inductive mode)	250 W (200 W inductive mode)
Halogen LV (Ferromagnetic Transformer)	250 VA (Capacitive mode not supported)	200 VA (Capacitive mode not supported)
Halogen LV (Electronic Transformer)	300 VA (Inductive mode not supported)	250 VA (Inductive mode not supported)
Cable Cross Section	**Single Cable:** 0.5 mm^2 - 2.5 mm^2 or 2 x 1.5 mm^2 **Ferrule cable:** 0.5…2.5 mm^2 **Without Ferrule:** 0.5…2.5 mm^2	**Single Cable:** 0.5 mm^2 - 2.5 mm^2 or 2 x 1.5 mm^2 **Ferrule cable:** 0.5…2.5 mm^2 **Without Ferrule:** 0.5…2.5 mm^2

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-$X_1X_2X_3X_4$

X_1	Reserved	
X_2	**0 :** No Ethernet	**1 :** Ethernet
X_3	**0 :** No Inputs	**1 :** Inputs
X_4	**2 :** 2 Channels	**4 :** 4 Channels

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)

CE KNX EIB

DS220126066AEN

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.

CONNECTION DIAGRAM

🔆 : Load

DIMENSION

DIMMABLE LOADS

ETS Parameter / Load	Halogen, Incandescent Lamps	Ferromagnetic Transformer (Inductive)*	Electronic Transformer (Capacitive)*	LED (Retrofit), CFL
Automatic	✔️	✔️	✔️	➖
Capacitive (phase cut off)	✔️	❌	✔️	✔️
Inductive (phase cut on)	✔️	✔️	➖	✔️

* : LV halogen, 12V-LED

✔️	Usage possible
➖	Usage is not recommended
❌	Not possible to use
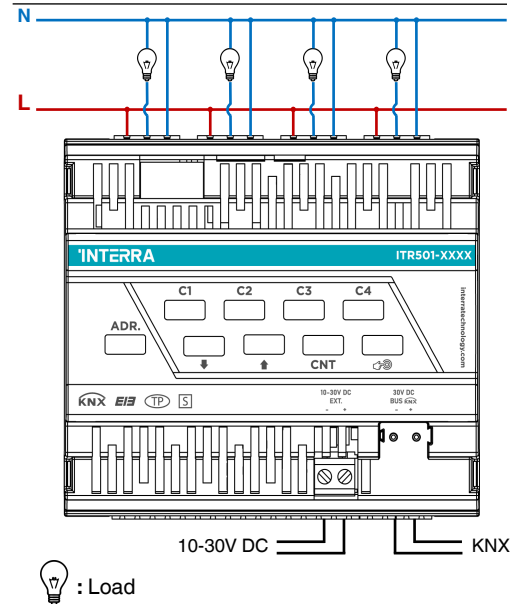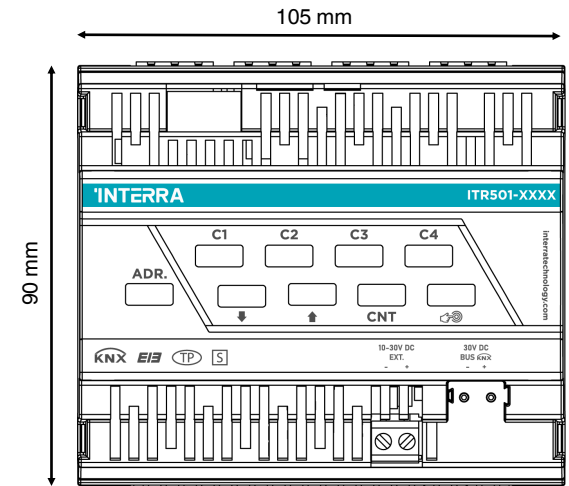
INSTALLATION STEPS

- 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.

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 destroyed during parallel switching.

DS220126066AEN