

(i) Power

iHub

iBus

iClip

iEscape

 isotera™

contactless power for LED lighting

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(i) Power

iClip

15W

Extracts power from the iBus without piercing the insulation



The iClip is a smart connector which transfers power from the iBus to LED fixtures by induction. It is connected onto the iBus and extracts power from the iBus without piercing the insulation, hence the reference to contactless power or inductive coupling. The iClip converts power into a DC current attuned to the requirements of the LED fixture.

### Features & Benefits

- The iClip can be connected anywhere on the iBus.
- Connections are easily undone, as you are not cutting into the wire insulation.
- Replaces traditional LED drivers.
- Replaces traditional connectors such as T-pieces or junction boxes.
- Very high efficiency.
- Robust, guaranteeing many years of problem-free operation.
- Range of LED drive currents from 200mA – 2100mA.
- Connecting onto the iBus in under 20 seconds.
- iBus insertion not polarity sensitive.
- Tool-free DC output spring clamp terminal accommodates conductor thicknesses up to 1.0mm<sup>2</sup>.
- Clamp terminal is colour coded to avoid polarity mistakes.
- Comes with a terminal cover to avoid accidental contact with live wires.
- Suitable for any LED luminaire without integrated driver module.
- Will pass through 60mm diameter hole in ceiling.

### Performance

- Power range: nominal 10W, loads 0 to 17W continuous, 20W peak. Note output voltage constraints.
- Current range: 200mA to 2100mA programmable in steps of 5mA
- Maximum output voltage: ~ 50V
- Maximum power at 350mA: ~ 10.5W
- Regulation in all cases: ± 5%
- Ripple in all cases 20%
- Efficiency at nominal power in all cases 95%.

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## Fully controllable

- The iClip can be switched ON/OFF and dimmed down to 5%.
- Each iClip can be controlled as part of a group or individually.
- Incorporates an RJ11 control socket to allow the connection of dimmer switches and sensors with standard flat 6-core data cable.
- Responds to 0-10V control voltage input.
- The control socket also provides SELV DC power for Isotera control devices.
- Output dims to a nominal 5% at 1.0V
- Output is fully ON if input is greater than 9.5V
- Output is fully OFF < 1.00V
- Auxiliary output (to power control devices): 5.5 to 7V, 50mW.
- 'Soft off': The fade rate is limited such that a change in output cannot occur faster than approximately 7.5% per msec. (i.e. 750msec. from max. to min. or min. to max.) Connector pin-out on RJ11 6P/6C (6 poles – 6 circuits) port:
- Pole (2): Command
- Pole (3): 0-10V control
- Pole (4): Common
- Pole (5): Auxiliary power output
- Poles (1), (6): not used

## Fault Conditions

The iClip has built-in safety features to avoid damage and potentially unsafe conditions:

- If the iClip is clipped onto the iBus without a fixture connected to its DC output terminal, the iClip will shut down. To reset the iClip, attach the LED fixture and take the iClip off the iBus and clip it back on. Alternatively reset the Power Hub.
- If the LED fixture power draw exceeds the maximum capacity of the iClip, the iClip will shut down.

## Part Numbers

Isotera Part Number	Description
Clip 15W-A-XXXX	2-15W Coupler 200-700mA
3MRJ11	iLink 3mtr Cable
2-Way 50mm	2-Way T-piece with 50mm lead
3-Way 50mm	3-Way T-piece with 50mm lead
Extender	Inverter Coupler

Output Wattage	Output Current		
	200 - 700mA	700 - 1050mA	1050 - 2100mA
15W	A	B	
30W	D	E	F
50W	G	H	I

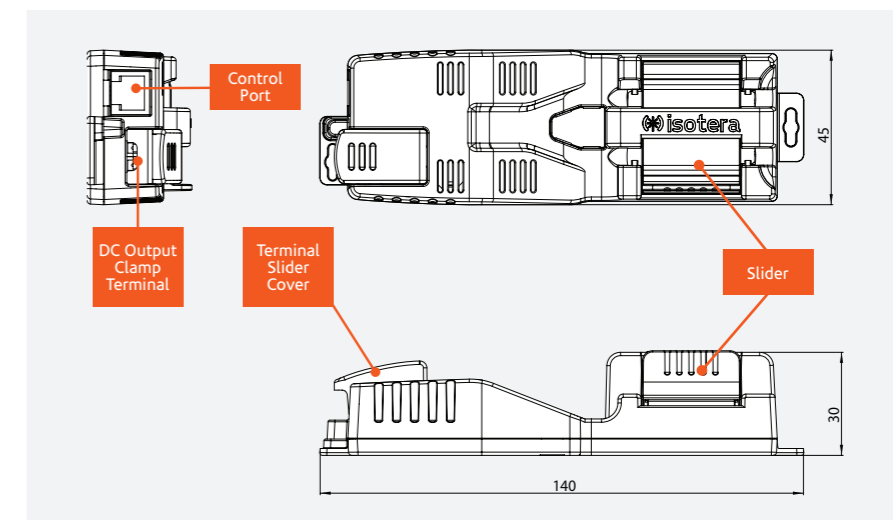
## Environmental

Parameter	Description	Min	Nom	Max
Operating Temperature	Thermal Environment	-10°C	25°C	40°C
Non Operating Temperature	Thermal Environment	-40°C		70°C
Storage temperature		-40°C		100°C
Non Operating humidity	Non Condensing <sup>1</sup>	0%		95%
Operating humidity	Non Condensing	0%		85%
Altitude Operating	3,000 meters	0.97 / 5.8	0.984 / 5.9	0.992 / 6.0
Altitude Non Operating	15,000 meters	178	180	182
IP rating	Indoor use only. IP 40			
Mechanical Shock Non Operating	50 g, trapezoidal input; velocity change ≥ 4.3 m/s.			
Random Vibration Non Operating	0.01 g2/Hz at 5 Hz, sloping to 0.02 g2/Hz at 20 Hz, and maintaining 0.02 g2/Hz from 20 Hz to 500 Hz.			

1: 95% RH achieved with a dry bulb temperature of 55 °C and a wet bulb temperature of 54 °C.

## Mechanical Data

- Dimensions (H x W x L): 30mm x 45mm x 140mm
- Weight:
- Material of case:
- Mounting options: The iClip comes with mounting lugs for screw (M5) and wire strap fixing.



## Compliance

### EMC

- EN55015:2006+A1:2007+A2:2009
- EN61547:2009
- EN61000-3-2:2006+A2:2009
- EN61000-3-3:2008

### Safety

- EN 61347-2-11
- EN 61347-1
- EN 62384

The specifications contained herein are believed to be correct at the time of publication and are subject to change without notice.