



u::Lux NetInj Light Power

Manual

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General Information

The *u::Lux NetInj Light Power* is used for the energy supply of a maximum of 2 *u::Lux Switches RJ45*. The Ethernet ports are equipped with RJ45 jacks and have the designation IN and OUT. An Ethernet connection (max. 100MBit) is connected from IN to OUT. On port OUT there is also voltage supply for the *u::Lux Switches* available.

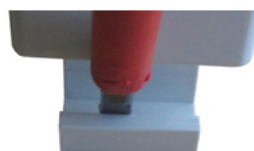
The energy supply of the *u::Lux NetInj Light Power* is carried out via direct voltage through the connections -VCC and +VCC. The voltage has to be sufficiently filtered (max. voltage ripples $2V_{ss}$) and it must be within the following range:

<i>u::Lux NetInj Light Power</i>	22V – 30V DC
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Mounting

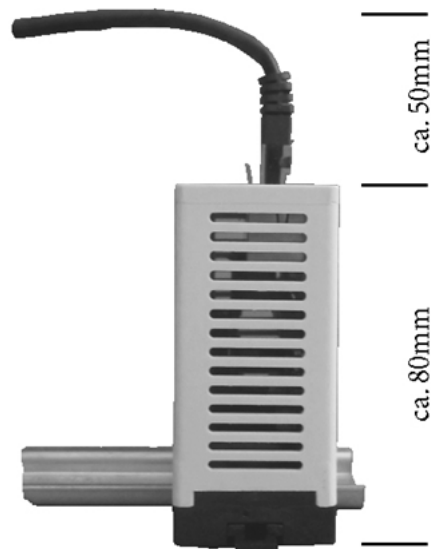
The mechanical assembly of the *u::Lux NetInj Light Power* is effected on a 35mm top-hat rail which has to be mounted horizontally. Therefore a flap is provided on the bottom of the housing. If the flap is pulled forwards (screwdriver) the *u::Lux NetInj Light Power* can be easily placed on the top-hat rail.



The installation width is 27mm. There are ventilation slots on the top and the bottom of the housing which provide heat exchange. Please note that these vents are not covered and a sufficient distance to adjacent components is kept.



The housing height is approx. 80mm. Please note that for the Ethernet-connections (on the front) there will be added approx. 50 mm additionally to the housing depth. Altogether a free installation depth of approx. 130mm is necessary. Please take this into consideration when selecting an appropriate junction box (wall cabinet).





Mounting order

1. u::Lux NetInj Light Power must snap into place on the top-hat rail.
2. Connect the network cable (not included in the scope of delivery) for the u::Lux Switches RJ45 to OUT.
We recommend the use of a Patch panel (taking into account the potential equalization) so that a shielded network cable can be lead to ground or rather to get a better ground-contact from the installation cable to the Patch cable. When indicated, already existing local connecting instructions must absolutely be obeyed.
3. For the control connect the network cable (not included in the scope of delivery) to IN.
4. Connect the energy supply.
A plug connector (Phoenix – MSTBA 2,5/ 2-ST-5,08) is included in the scope of delivery.
Connect the negative supply of the energy supply to Pin –VCC and the positive supply voltage to +VCC (see chapter General Information).

Startup

After connecting the power supply the green LED (48V) has to illuminate. With this LED the presence of the following voltage is indicated:

1. Internal voltage generation 48 Volt (on port OUT).

OUT: is used exclusively to connect a maximum of 2 u::Lux Switches RJ45.

IN: is used to connect a PLC control or rather to connect an Ethernet Switch.

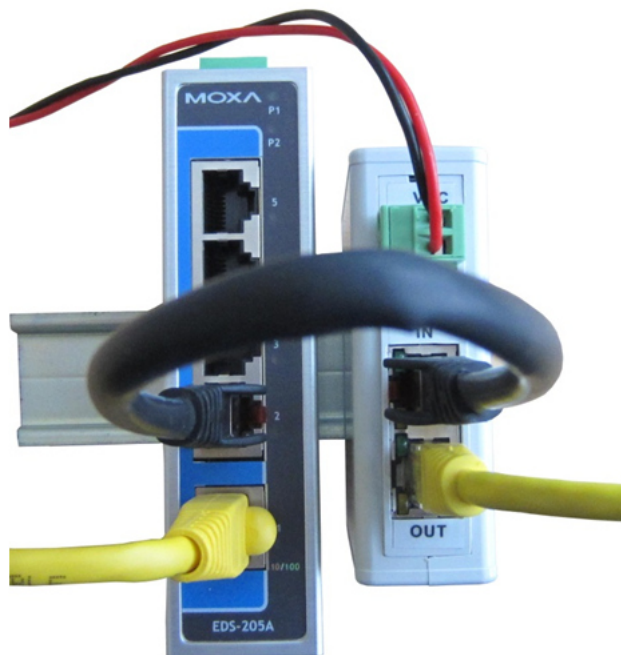
Startup order

1. Control of the green LED. The LED has to illuminate.

Practical example

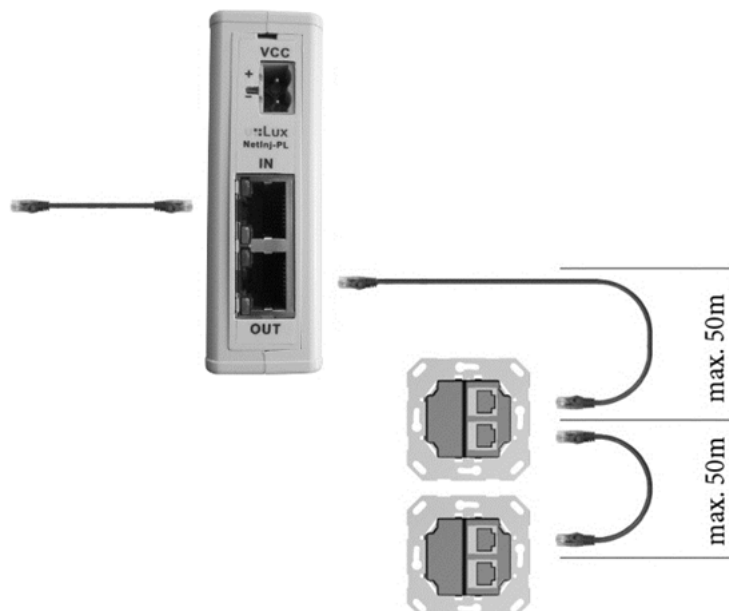
The installation and energy supply of 2 u::Lux Switches RJ45 is required. All u::Lux Switches RJ45 shall be connected to a control.

The u::Lux Switches RJ45 are connected to port OUT of the u::Lux NetInj Light Power. Port IN is connected to the PLC control.



Network wiring

An *u::Lux Switch RJ45* line may not exceed the total length of 200m because of the cable resistance (voltage drop). We recommend not exceeding the max. length of 50m of a single sub segment.





Technical data

Supply:

Direct voltage with a ripple of max. $2V_{SS}$

u::Lux NetInj Light Power	22V - 30V
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Power consumption:

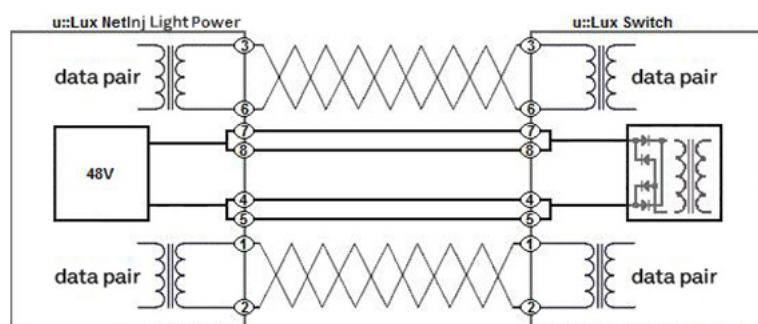
max. 0,5W (without connection of u::Lux Switch RJ45)

max. 5 W (with connection of 2 u::Lux Switches RJ45)

Connections:

1x supply (+VCC or rather -VCC, Phoenix MSTB 2,5/ 2-ST-5,08

1x Ethernet RJ45 jack with 48V supply (OUT -> each via Pin 4+5 [-VCC] and 7+8 [+VCC])



1x Ethernet RJ45 jack without 48V supply (IN)

1x ground connection (via metal bracket on the bottom of the housing).

Displays:

At network connection OUT there is a green LED for displaying the voltage of 48V.

Network:

100BaseT

Ambient temperature:

-10 °C up to +40°C

Storage temperature:

-30 °C up to +80°C

Protection type:

IP30

Protection class:

III

Assembly type:

Vertical on horizontal top-hat rail (35mm)

Installation dimensions:

83mm x 27mm x 80mm

Housing materials:

synthetic mat. LEXAN UL94-V0, self-extinguishing

Colour: RAL 7035 light grey

Temperature range: up to +100°C



Hazard warnings

Attention! Assembly and installation of electrical devices may only be performed by a qualified electrician. Strictly observe the prevailing accident prevention measures. Failure to observe the installation instructions may result in damage to the device, fire or other dangers.

u::Lux NetInj Light Power is a device which does not correspond to the PoE standard.

CE – marking

The CE marking is exclusively addressed to the governmental supervising authorities of the Member States and facilitates the free movement of goods. The CE marking does not represent any guarantee of specific features.

Guarantee

The guarantee complies with the statutory requirements. Technical changes and error reserved.

Ordering Information

u::Lux NetInj Light Power order number 11081



Version Management

Version	Date	Name	Notes
1.00	07.07.2014	KH	Creation of the document
1.01	01.10.2014	AK	Contact updated