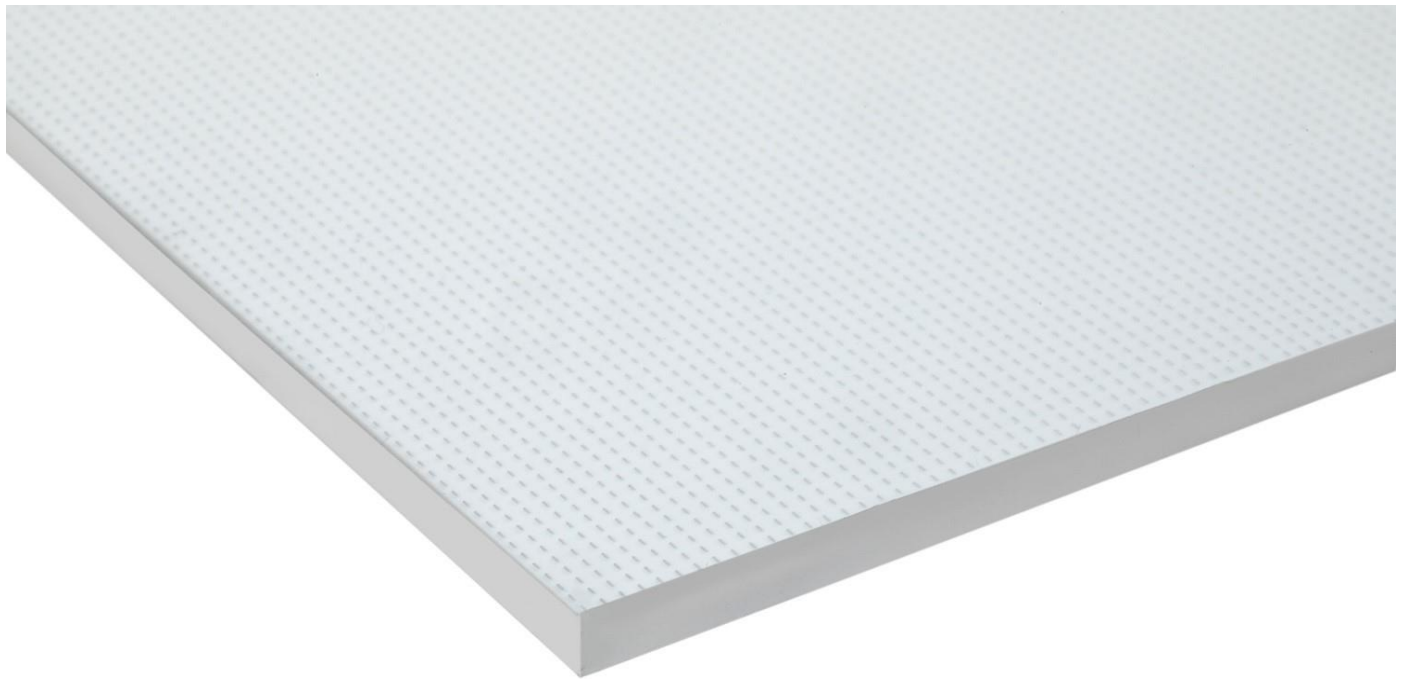
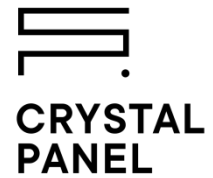


STANDARD OF PRODUCTION
CPL THICKNESS BALANCE



CPL Thickness Balance is an element made of engraved PMMA Plexiglas with an integrated LED lighting system designed for, among other things, advertising backlighting and mounting in frames and furniture. It is characterized by a low thickness tolerance of max. 5%, even light dispersion, low energy consumption, and a long life span.

Crystal Panel LED Thickness Balance is made according to the Customer's requirements with proven and durable components



STANDARD OF PRODUCTION

CPL THICKNESS BALANCE



01 / STANDARD OF PRODUCTION INCLUDES

1. PMMA thickness:

- a. Standard: 4 mm or 6 mm

2. The pattern of the engraving on Plexiglas - dots

3. LED strips - flexible:

- a. Of the power supply / output power:
 - 12V: 17W/running meter
 - 24V: 21W/running meter
- b. Standard colour temperature of white light: 3000K, 4000K, 5000K, 6500K
- c. On request: we can make strips with other parameters of output power and color temperature

4. Types of illumination:

- a. UNO: LED strip installed along 1 edge – It is recommended to place the strip along the longer edge for the best uniformity effect
- b. DUO: LED strip installed along 2 edges – It is recommended to place the strip along the longer edge for the best uniformity effect
- c. QUATTRO: strip installed along 4 edges
- d. **In the groove - according to the following terms:**
 - Location: 2 mm from the illuminated edge
 - Depth: 4.5 mm
 - Width: 3 mm
 - For shapes other than rectangular - no radiator

5. As a standard, a power cord or cords are routed out of each Crystal Panel product, depending on the design provided by the customer or the need for an additional power supply. **All power cords must be connected directly to a power supply or an installation of a power supply** adapted to the project requirements.

6. It is not allowed to cut additional supply wires or modify the power supply system in any way without the authorisation of the manufacturer.

7. Installation of the power cord:

- a. Cord outlet - bottom right corner
- b. Cord length 1.5 m (SMYp 2x0,35), color - black
- c. With or without socket

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STANDARD OF PRODUCTION

CPL THICKNESS BALANCE



8. Edges nomenclature:

- a. Shorter dimension – vertical
- b. Longer dimension – horizontal

9. Dimensions and thickness tolerance:

- a. Panel area up to 0.5 m²: -1 mm from the nominal dimension
- b. Panel area over 0.5 m²: -2 mm from the nominal dimension
- c. Thickness: +/- 20% (manufacturing tolerance of PMMA sheets)

10. Edge shading:

- a. 8 - 10 mm from the external edge where the LED strip is installed
- b. Other solutions are possible depending on the agreed conditions - to be determined with the Consultant.
- c. 11 mm from external edges with LED strip and cord (DUO III)

Attention! Placing the cable along the edge of the radiator forces the length of the Plexiglas to be reduced by 3 mm (UNO III)

11. The type of reflective material depends on the panel's overall dimensions and the kind of backlit graphics media:

- a. Reflective PVC film is used in panels not exceeding 1000 x 500 mm in size.
- b. As a standard, HIPS is used in panels exceeding any of the above dimensions.

02 / STANDARD WIRING DIAGRAMS

1. We use a closed circuit:

- a. When the length of the LED strip exceeds:
 - 12V: 1300 mm
 - 24V: 1500 mm
- b. In the solution for the panel UNO III
- c. In the solutions for the panels DUO II and DUO III
- d. In all solutions for the QUATTRO panels

2. We use an additional power cord:

- a. in solutions for UNO panels at LED strip lengths of more than 1300 mm (12V) and 1500 mm (24V)
- b. in DUO solutions with LED strip lengths of more than 1300 mm (12V) and 1500 mm (24V)
- c. in solution for QUATTRO II

Orders are processed according to the above-described standard and the schemes shown below, unless the customer agrees individually on the parameters of the ordered product.

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STANDARD OF PRODUCTION

CPL THICKNESS BALANCE

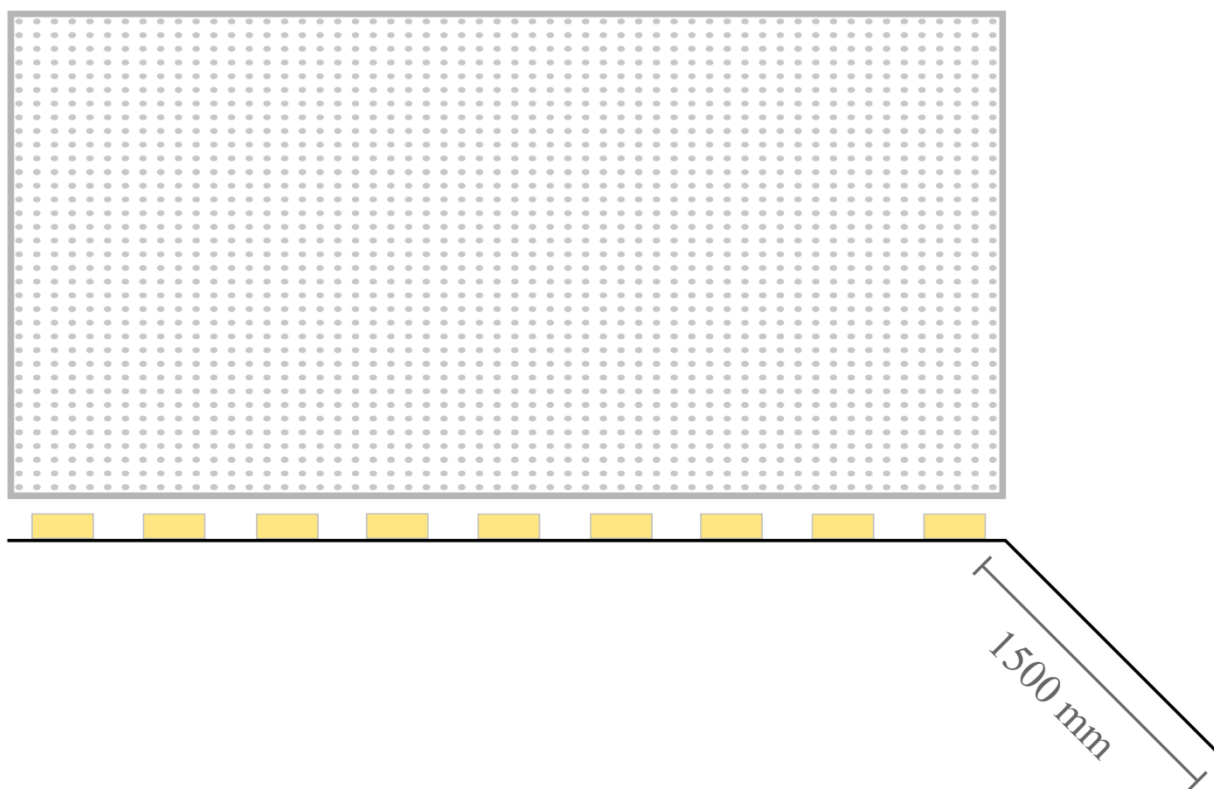


3. UNO:

a. UNO I

- A power scheme is used when the length of the LED strip does not exceed:
 - 12V: 1300 mm
 - 24V: 1500 mm
- Power cord length: 1500 mm

UNO I



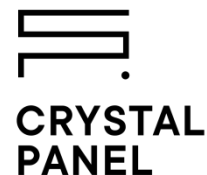
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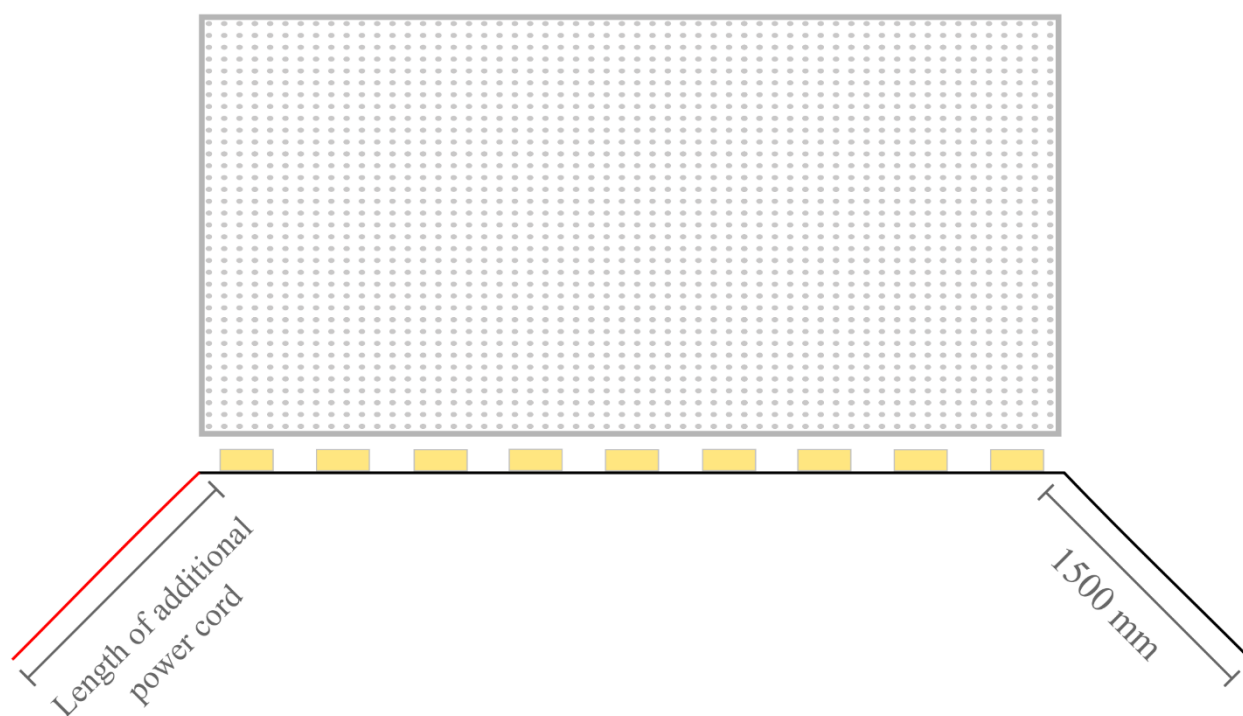
CPL THICKNESS BALANCE



b. UNO II

- The power scheme is used when the length of the LED strip exceeds:
 - 12V: 1300 mm
 - 24V: 1500 mm
- Additional power supply is used
- Power cord length: 1500 mm
- Length of additional power cord: edge length with LED strip+1500 mm

UNO II



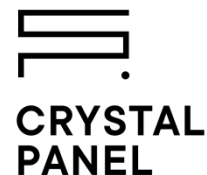
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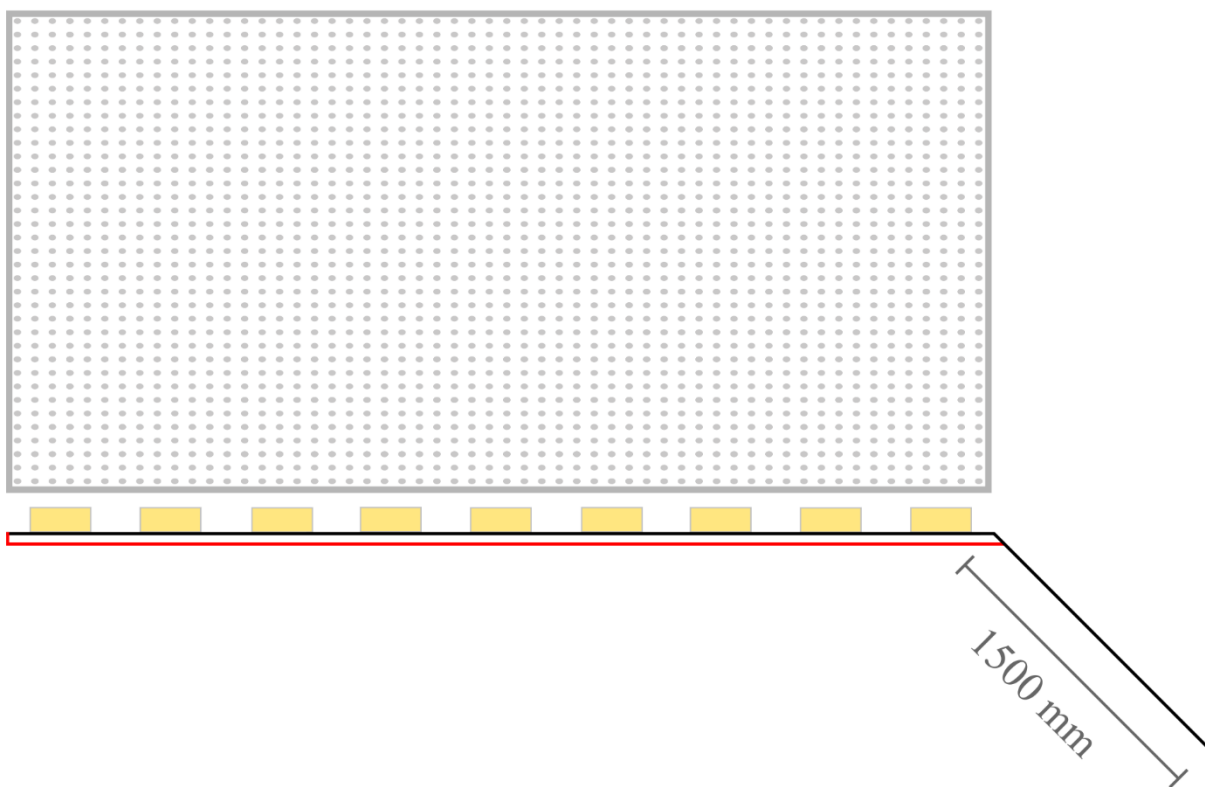
CPL THICKNESS BALANCE



c. UNO III

- The power scheme is used when the length of the LED strip exceeds:
 - 12V: 1300 mm
 - 24V: 1500 mm
- closed circuit
- Power cord length: 1500 mm
- An additional power cable routed along the edge of the radiator is connected to the main power cable

UNO III



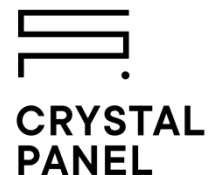
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STANDARD OF PRODUCTION

CPL THICKNESS BALANCE

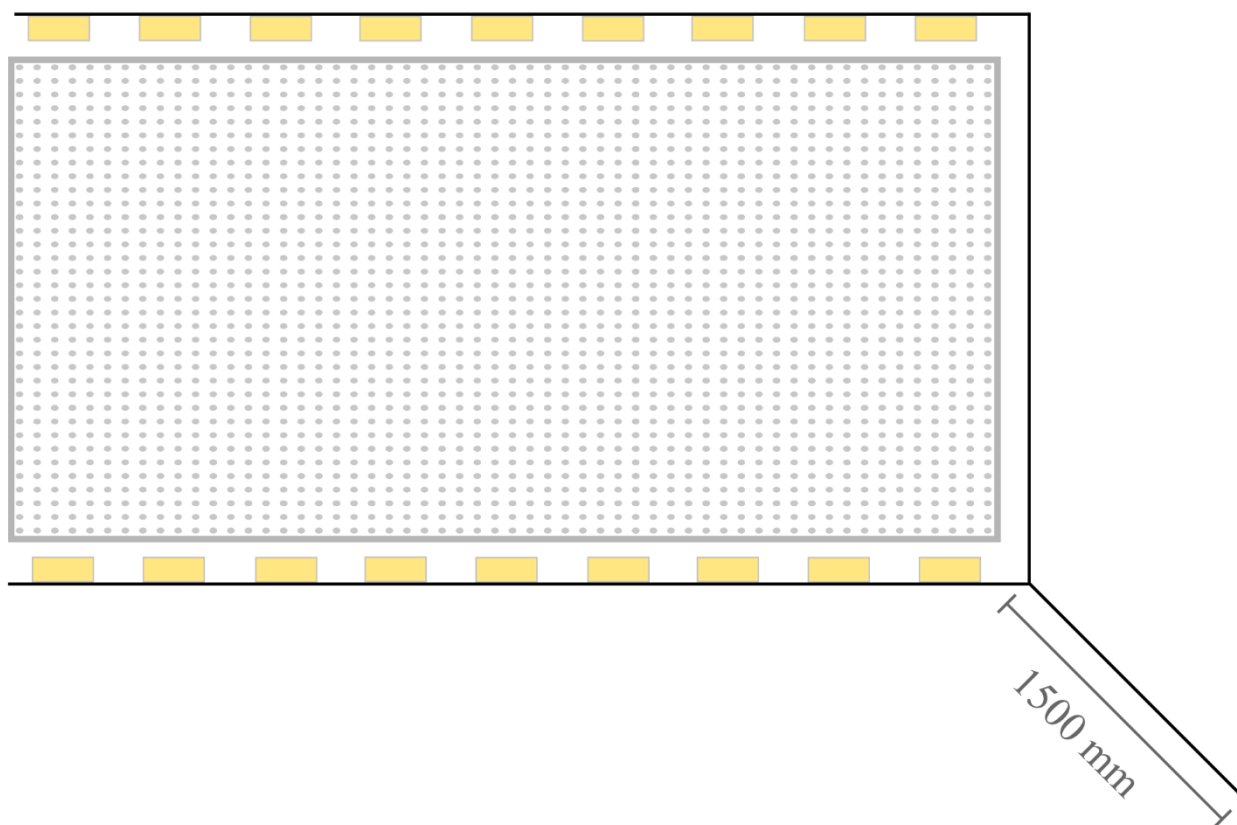


4. DUO:

a. DUO I

- A power scheme is used when the length of the LED strip does not exceed:
 - 12V: 1300 mm
 - 24V: 1500 mm
- Power cord length: 1500 mm

DUO I



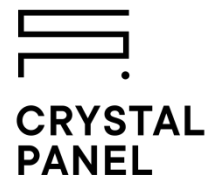
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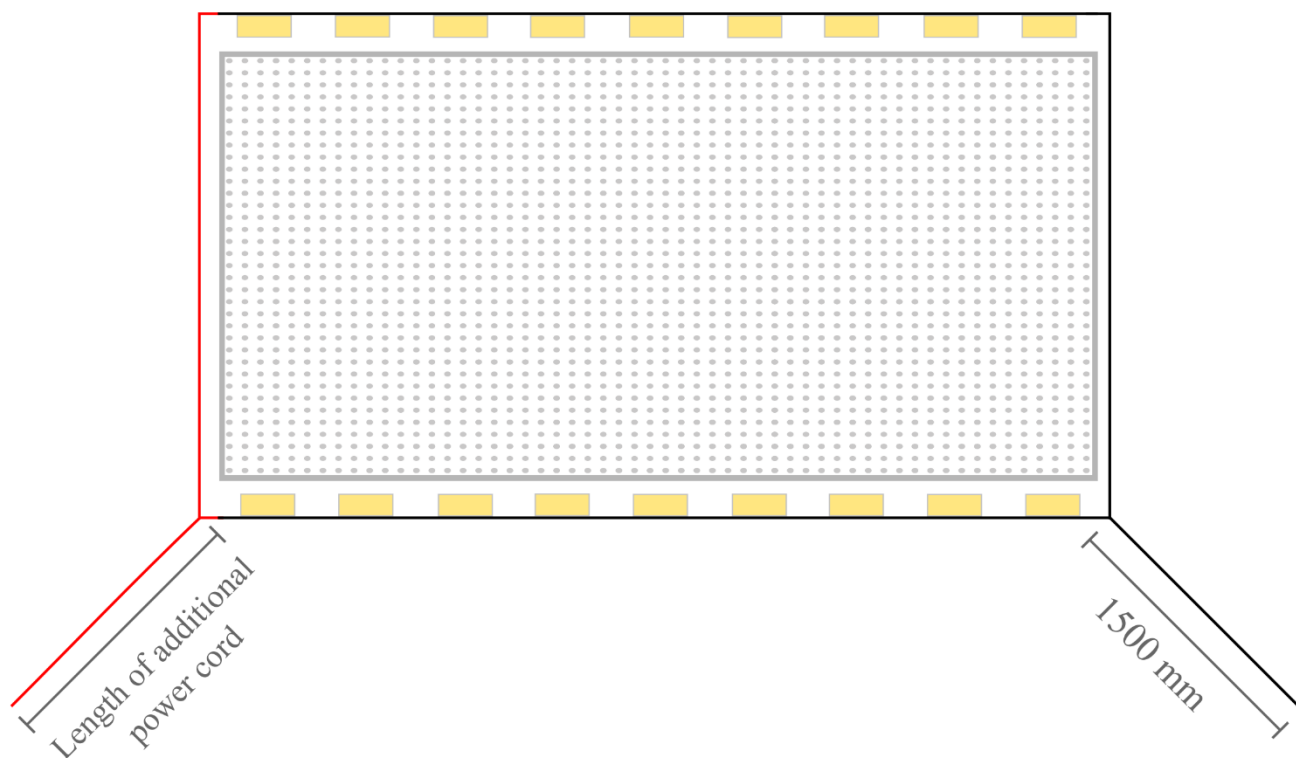
CPL THICKNESS BALANCE



b. DUO II

- The power scheme is used when the length of the LED strip exceeds:
 - 12V: 1300 mm
 - 24V: 1800 mm
- Closed circuit
- Additional power supply is used
- Power cord length: 1500 mm
- Length of additional power cord: edge length with LED strip+1500 mm

DUO II



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STANDARD OF PRODUCTION

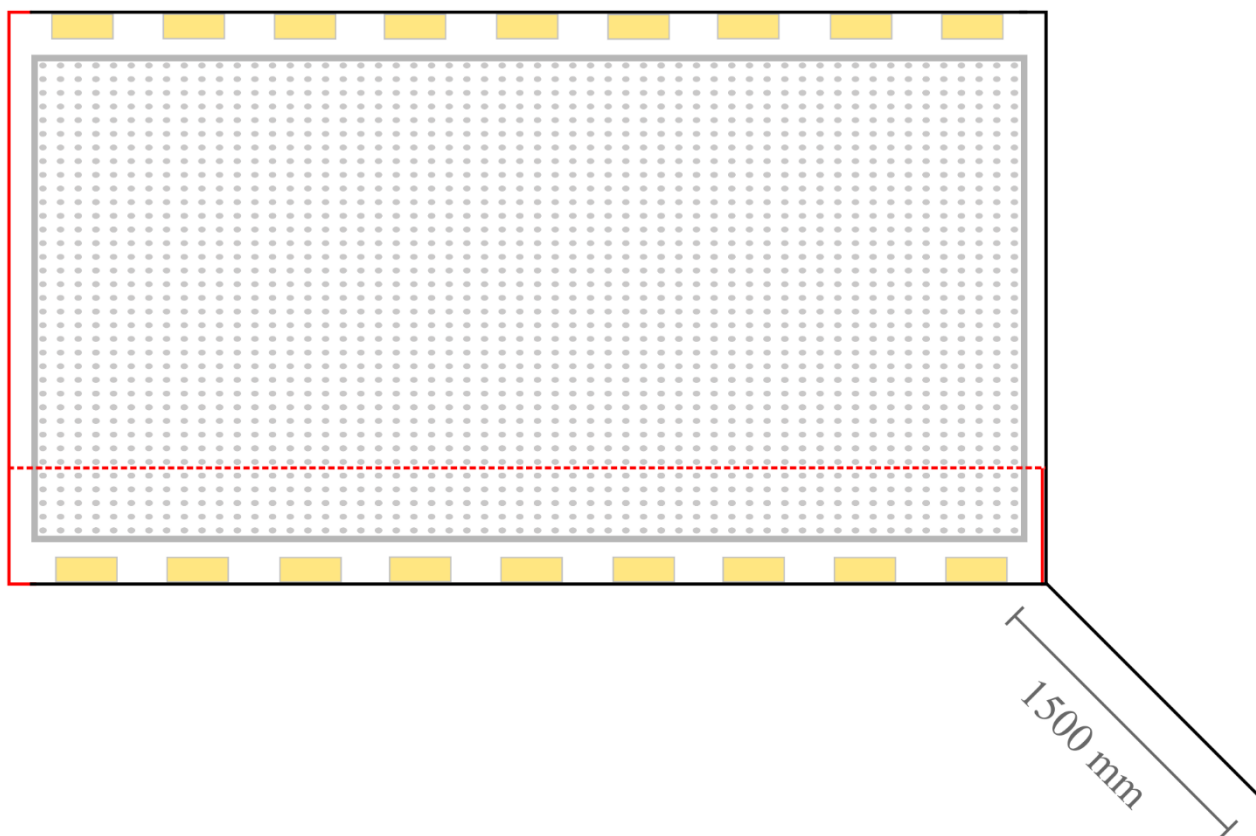
CPL THICKNESS BALANCE



c. DUO III

- The power scheme is used when the length of the LED strip exceeds:
 - 12V: 1300 mm
 - 24V: 1500 mm
- Closed circuit
- Power cord length: 1500 mm
- The cord increases the thickness of the CPL by 3 mm

DUO III

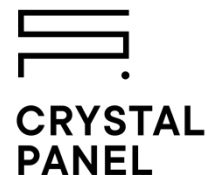


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STANDARD OF PRODUCTION

CPL THICKNESS BALANCE

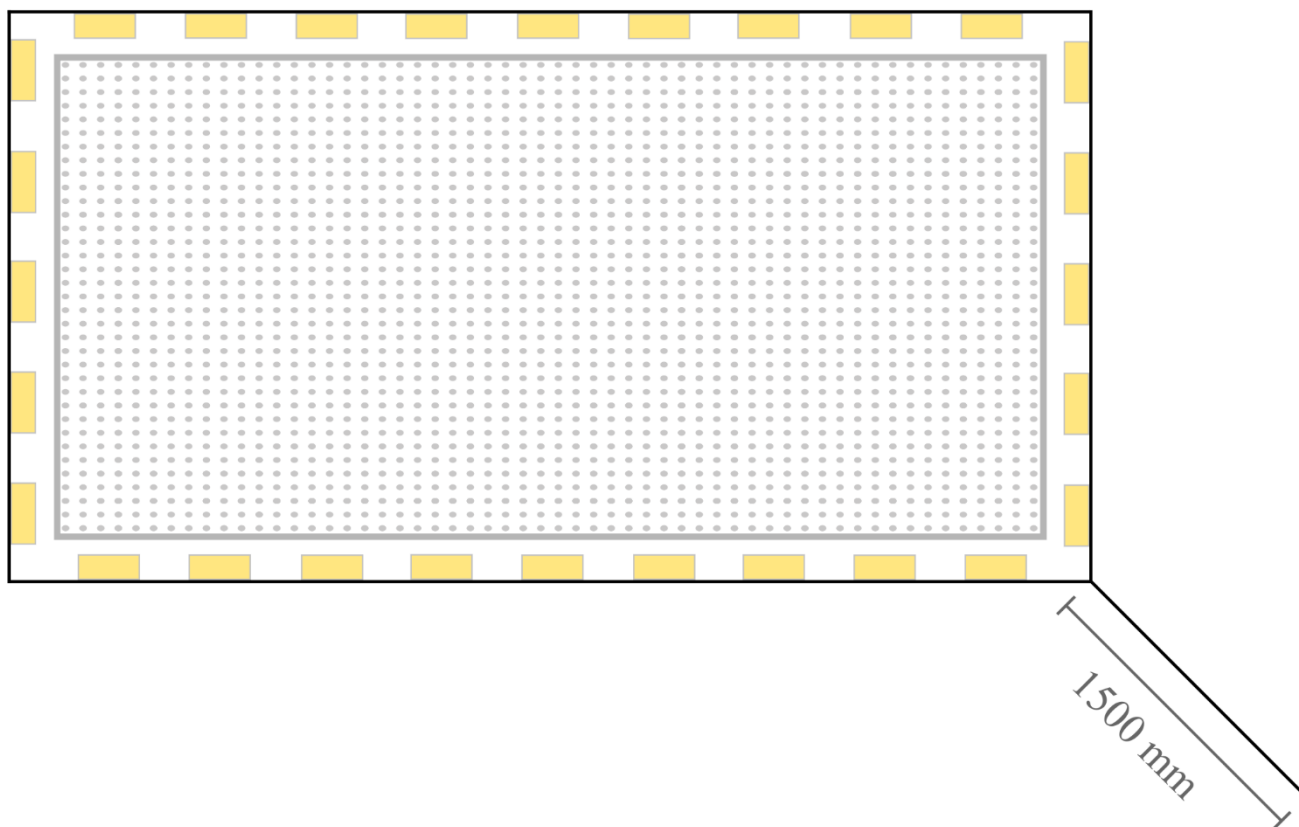


5. QUATTRO:

a. QUATTRO I

- The power scheme can be used when the length of the LED strip along the perimeter does not exceed:
 - 12V: 2600 mm
 - 24V: 3000 mm
- Closed circuit
- Power cord length: 1500 mm

QUATTRO I



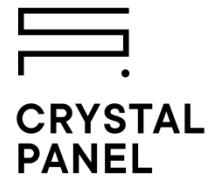
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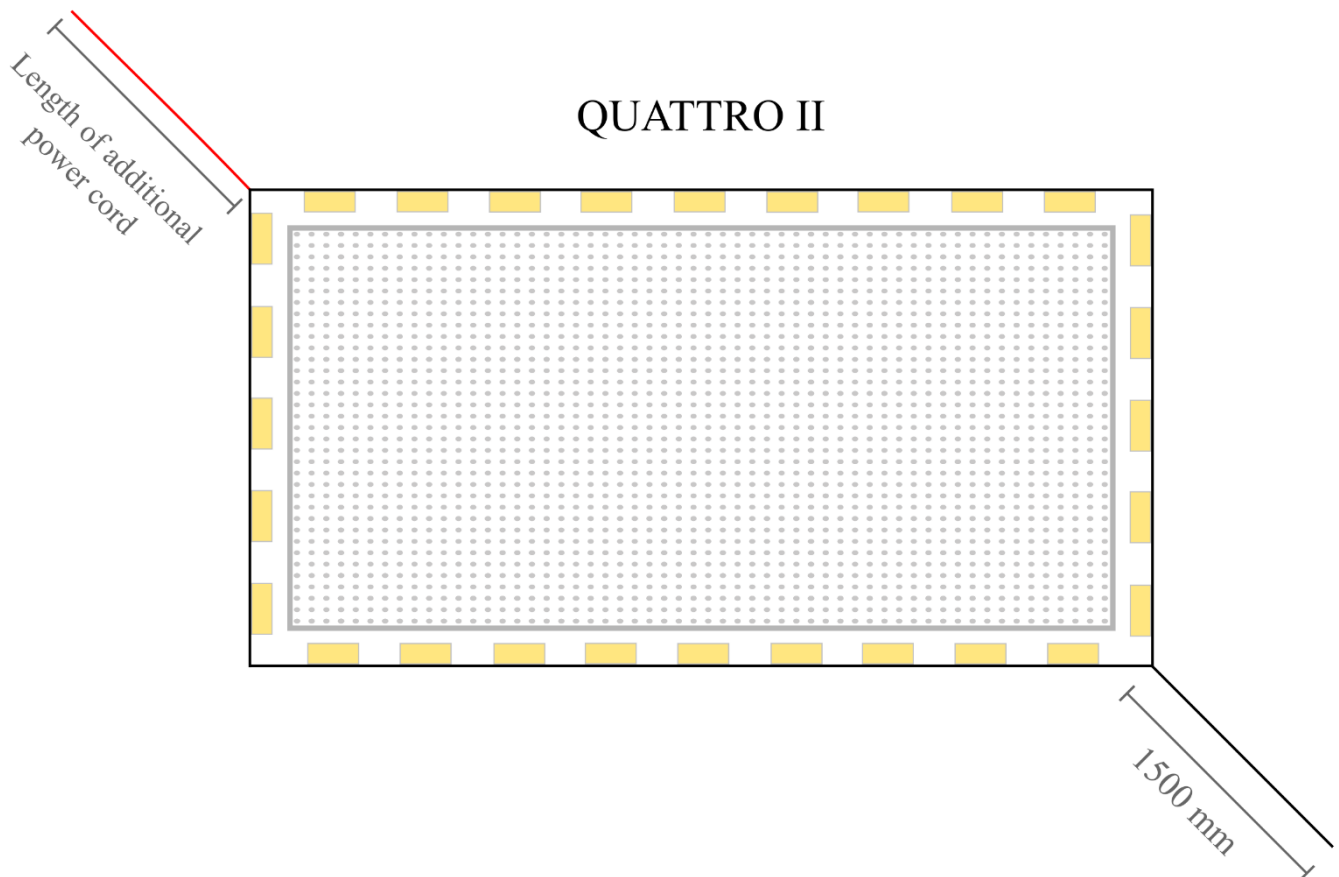
STANDARD OF PRODUCTION

CPL THICKNESS BALANCE



b. QUATTRO II

- The power scheme can be used when the length of the LED strip along the circumference exceeds:
 - 12V: 2600 mm
 - 24V: 3000 mm
- Closed circuit
- Additional power supply is used
- Power cord length: 1500 mm
- Length of additional power cord: edge length of edge A + length of edge B + 1500 mm



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