12V 240 LEDs/m SMD strip - 6000K

Cool White | 12V DC | 10mm PCB | 12.5mm cut | 5m maximum run | IP20

12V DC	10mm PCB	12.5mm cut	5m max. run	IP20

SPECIFICATIONS

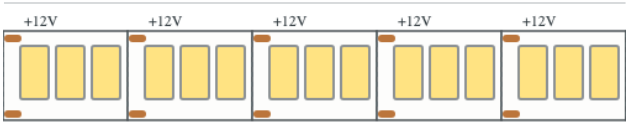
Light colour	Cool White 6000K
Input	12V DC constant voltage
LED package	SMD 2835
LED density	240 per metre
Power	20 W/m
CRI	Ra 98
Lumens per metre	1,947 lm/m
Output per 5m	9,735 lm (calculated)
LEDs per roll	1,200 LEDs / 5m
PCB width	10mm
Cut interval	12.5mm / 1.25cm, every 3 LEDs
Protection	IP20, dry indoor use
Roll / max. run	5 metres
Beam angle	120°
Dimmable	Yes, compatible 12V DC dimmer
Backing	3M Tape
Warranty	5 Years



Unlit product face: dense LED spacing and aligned cutting pads.

Cool, crisp light for contemporary displays and utility spaces.

12V CUTTING LAYOUT



10mm PCB | 12.5mm cut interval | 3 LEDs per cut

HIGH DENSITY. PRECISE CUTTING.

Closely spaced SMD LEDs on a slim 10mm PCB provide bright linear lighting. The 1.25cm cut interval helps fit shelves, cabinetry and profiles accurately. Use an aluminium profile to dissipate heat and a compatible diffuser where a softer lighting effect is required.

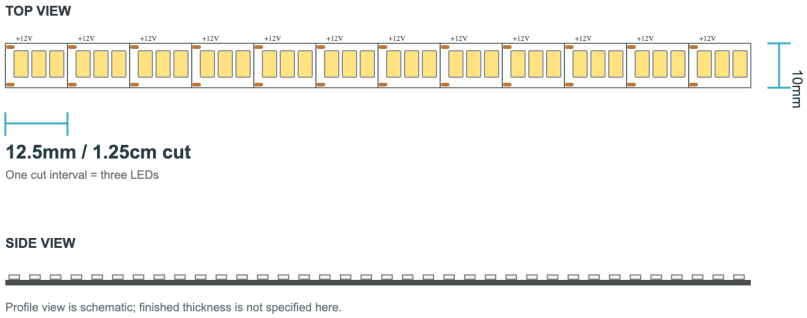
Dimension drawing and wiring: page 2 | Installation: page 3 | Colour comparison: page 4

Specifications are based on ATOM LED packaging and merchant-confirmed range details. Electrical load values are calculated at the nominal 12V DC / 20W/m rating.

Dimensions and electrical connection

10mm PCB width with a 12.5mm (1.25cm) three-LED cutting unit.

12V STRIP LAYOUT



Cut only at the marked copper pads. Allow additional space for connectors and cables; confirm clearance in your chosen aluminium profile.

WIRING - SINGLE-COLOUR STRIP

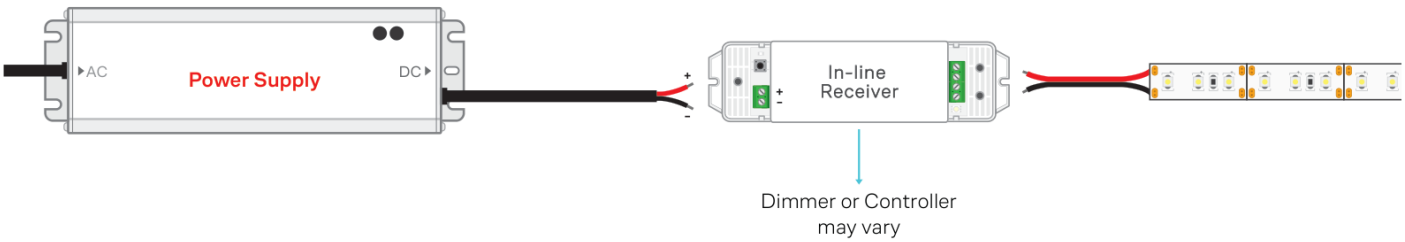
Use a regulated 12V DC constant-voltage driver. The diagrams below show the DC-side connections; choose 12V-rated equipment for this strip.

Single-colour parallel wiring - use a 12V DC driver for this product.



From the supplied LED Strip Manual: keep each strip run within 5m. Feed additional runs in parallel; size the driver for their combined load. Individually insulate any unused + and - end wires.

Optional dimming: driver to compatible single-channel dimmer to strip.



Parallel diagram: supplied LED Strip Manual. Dimmer diagram: Flexfire LEDs installation guide, driver branding removed. Equipment appearance varies.

POWER PLANNING AT THE ATOM 20 W/m RATING

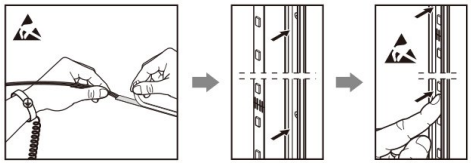
Strip load: 1m = 20W / 1.67A; 3m = 60W / 5A; 5m = 100W / 8.33A. The supplied manual requires 30% headroom: minimum driver rating = total strip watts × 1.30. For 5m, choose a 12V driver rated at least 130W, allowing for any derating.

Never connect the strip directly to 220-240V AC mains or a 24V output.

Installation and safe handling

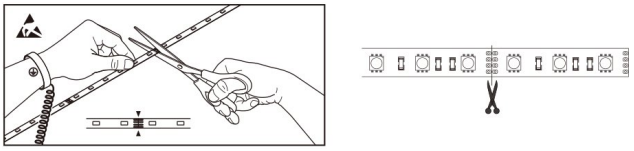
Selected guidance and original illustrations from the supplied Low Voltage LED Strip Manual.

01 PREPARE & FIT



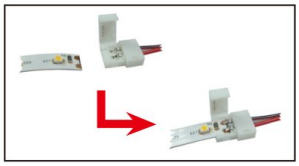
Isolate power. Use a clean, smooth, dry aluminium profile for this 20W/m strip. Wear ESD protection; peel the liner and press the PCB gently, not the LED chips.

02 CUT AT THE MARK



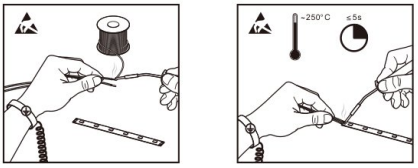
Cut flat and square at the printed scissors / paired copper pads. This ATOM strip cuts every 3 LEDs: 12.5mm (1.25cm). Never cut through an LED.

03 CONNECT



Choose a 10mm, two-pole single-colour connector that fits this dense PCB and is rated for the load. Match + and -; check the contacts and provide strain relief.

04 SOLDER IF REQUIRED



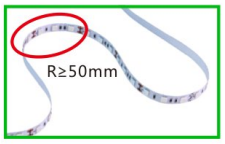
The manual specifies an iron temperature no higher than 250°C and contact under 5 seconds. Use ESD protection and insulated joints; do not bridge + and - pads.

05 SUPPORT & TEST



For long lengths, use two people and unreel only as needed while fitting. Keep the strip supported. Before powering, fully uncoil and lay it out; never test on the reel.

06 BEND, DO NOT TWIST



Do not kink, twist, crush or fold around a sharp edge. Follow the manual's installation bend radius of at least 50mm. Protect components and solder joints.

Illustrations: supplied Low Voltage LED Strip Manual, printed pages 1-4. They demonstrate installation methods, not the exact 240 LEDs/m PCB. Installation should be carried out by a suitably qualified electrician.

CORRECT POWER SUPPLY IS ESSENTIAL

Never connect this 12V DC strip directly to 220-240V AC mains or a 24V supply. Incorrect voltage can permanently damage it. Isolate the supply before cutting, connecting or making any adjustment. Check voltage, polarity and connections before commissioning.

Colour appearance and applications

This datasheet is for the Cool White 6000K version, SKU ALCW240L12V.

ILLUSTRATIVE INSTALLED LOOK

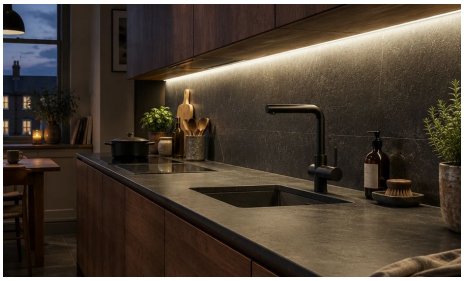


Cool, crisp light for contemporary displays and utility spaces. Illustrative scene, not a photometric test photograph.

COMPARE THE THREE WHITE LIGHT CHOICES



3000K · warm



4000K · natural



6000K · cool

Room finishes, camera processing and displays affect the apparent colour and brightness.

PLAN YOUR INSTALLATION

Use this IP20 strip in dry indoor spaces, such as cabinetry, shelving, coves and display joinery. Fit an aluminium profile for heat dissipation; a suitable diffuser can soften the appearance of individual LEDs.

Plan each powered run within 5m and connect additional runs in parallel. A full 5m roll draws approximately 100W; allow at least 130W of rated 12V driver output, with further allowance for the driver's installation conditions.

MADE TO FIT YOUR PROJECT

ATOM LED is a UK-based bespoke-lighting supplier. For made-to-measure help with strips, profiles and power supplies, visit atomled.co.uk/pages/custom-projects. Custom cuts follow the marked cut points and run limits.