

## Flexible LED Strip Selector Guide

### SL2835 series

- Flexible LED light source
- High performance 2835 SMD LED emitters
- High Color Rendering Index (CRI>90)
- Easy to cut at intervals
- Wide 120° angle of emission
- Long life, low power low heat
- Choice of IP ratings
- 3M Adhesive backing tape



### Specifications

| LED Density        | Low                |      |           | Medium             |      |          | Medium +           |      |      | High               |      |             | Very High           |      |            |
|--------------------|--------------------|------|-----------|--------------------|------|----------|--------------------|------|------|--------------------|------|-------------|---------------------|------|------------|
| Part No.           | PF5000x-300SL2835X |      |           | PF5000x-600SL2835X |      |          | PF5000x-640SL2835X |      |      | PF5000x-900SL2835X |      |             | PF5000x-1200SL2835X |      |            |
| IP Rating          | IP20               | IP65 | IP68      | IP20               | IP65 | IP68     | IP20               | IP65 | IP68 | IP20               | IP65 | IP68        | IP20                | IP65 | IP68       |
| Strip Width (mm)   | 8.0                | 9.0  | 11.0      | 8.0                | 9.0  | 11.0     | 10.0               | 11.0 | 11.0 | 10.0               | 11.0 | 11.0        | 12.0                | 13.0 | 13.0       |
| LED's/metre        | 60                 |      |           | 120                |      |          | 128                |      |      | 180                |      |             | 240                 |      |            |
| LED pitch          | 16.6               |      |           | 8.33               |      |          | 7.81               |      |      | 5.55               |      |             | 4.16                |      |            |
| Cut point          | 12V 50mm           |      | 24V 100mm | 12V 50mm           |      | 24V 50mm | 24V 62.5mm         |      |      | 12V 16.66mm        |      | 24V 33.32mm | 12V 12.5mm          |      | 24V 24.0mm |
| 5.0M Reel size/Qty | 300                |      |           | 600                |      |          | 640                |      |      | 900                |      |             | 1200                |      |            |



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### Electrical Characteristics (Ta=25°C)

| LED Density   | Low                 | Medium              | Medium+                | High                 | Very High             |
|---|---------------------|---------------------|------------------------|----------------------|-----------------------|
| Part No.  | PF5000x8-300SL2835X | PF5000x8-600SL2835X | PF5000x10-640SL2835X   | PF5000x10-900SL2835X | PF5000x12-1200SL2835X |
| Operating Voltage   | 12V or 24V          |                     | 24V                    | 12V or 24V           |                       |
| Power/Metre   | 4.8W                | 9.6W                | 9.6W, 12W, 18W, 21W, * | 14.4W                | 19.2W                 |
| Operating Temp  | -20° +45°C          |                     |                        |                      |                       |
| * Note: At power ratings above 11W secondary heatsinking is required to maintain reliability& lifetimes |                     |                     |                        |                      |                       |

### Optical Characteristics @ Ta=25°C

| LED Density    |                |      | Low                             | Medium | Medium+ | High  | Very High |      |      |      |
|----------------|----------------|------|---------------------------------|--------|---------|-------|-----------|------|------|------|
| Colour         | Wavelength/CCT | Code | Luminous Flux Typ. (lm) / metre |        |         |       |           |      |      |      |
| Red            | 630nm          | R    | 45cd                            | 90cd   |         | 135cd | 180cd     |      |      |      |
| Amber          | 610nm          | A    | 45cd                            | 90cd   |         | 135cd | 180cd     |      |      |      |
| Yellow         | 595nm          | Y    | 30cd                            | 60cd   |         | 90cd  | 120cd     |      |      |      |
| Blue           | 470nm          | B    | 21cd                            | 42cd   |         | 63cd  | 84cd      |      |      |      |
| Green          | 525nm          | G    | 72cd                            | 144cd  |         | 216cd | 288cd     |      |      |      |
| Pure White     | 6000K-6500K    | PW   | 480                             | 960    | 1850    | 2100  | 3100      | 3600 | 2000 | 2400 |
| Daylight White | 5000K          | DW   | 480                             | 960    | 1850    | 2100  | 3100      | 3600 | 2000 | 2400 |
| Natural White  | 4000K-4500K    | NAW  | 480                             | 960    | 1750    | 2000  | 2900      | 3500 | 2000 | 2300 |
| Warm White     | 2700K-3000K    | WW   | 450                             | 900    | 1650    | 1900  | 2800      | 3400 | 1900 | 2200 |
| Viewing angle  | 120°           |      |                                 |        |         |       |           |      |      |      |

White types are specified by colour temperature range and or x, y, coordinates from cool to warm white for consistent colour rendition. Please contact our office for latest luminous intensity yields.



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**Part Numbering**

PF5000 denotes 5.0M reel. Suffix -x in Part No. denotes colour

Suffix -xx in Part No. denotes operating voltage

See additional data sheet for full colour RGB types

Other LED types and configurations for power/intensity are available on request

**Handling notes:**

Ensure that the correct low voltage dc power supply is matched to the flexible strip specification

Avoid repeated bending of the strip as this will damage the circuit and components and please observe the maximum bend radius of 30mm

Avoid handling of the surface components in particular the LED emitters, as any pressure may result in damage and latent failures.

When cutting IP65 the ingress protection will be compromised please ensure that the assembly is re-sealed accordingly in order to maintain the IP rating

**Installation notes:**

To achieve a consistent luminous effect, each 5 metre length should be connected to the power source.

To ensure long life we recommend that the strip is kept as cool as possible. Environments where the temperature exceeds 40°C should be avoided.

It is important to consider ambient temperature rise and to ensure that there is adequate ventilation. We recommend that the LED strips are applied to a heat conducting substrate such as aluminium profile and that higher power types >11W/metre are mounted on a suitable heatsink to allow cooling and maintain LED life.

High density LED strip is not recommended for use in sealed enclosures where temperatures may rise and heat cannot escape.

**Drive & Control:**

For control solutions please refer to our range of controllers and drive options which include DMX, RF Wireless, WiFi. More information may be found at <http://www.plusopto.co.uk/led-controllers.html>

Specifications may be subject to change without notice