



Intelligent Temperature Controlled LED Strip



Key Features:

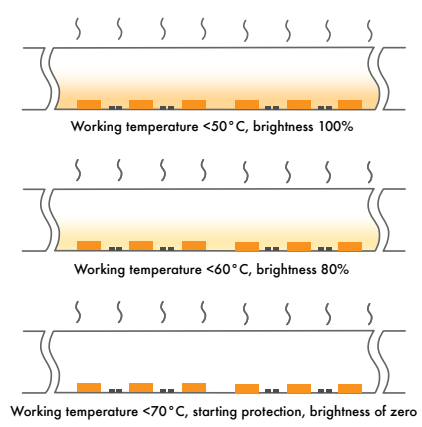
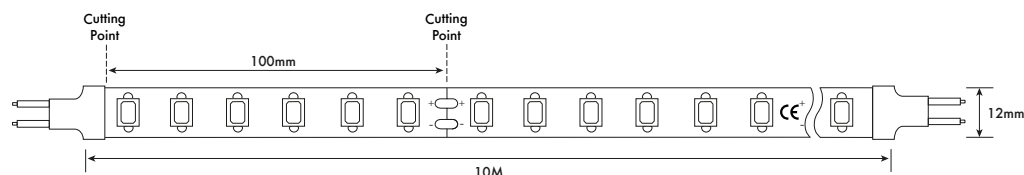
- Constant current design to ensure even colour distribution over longer lengths
- Intelligent temperature control to prolong life of strip
- High temperature limitation to ensure safety
- Available in 10M lengths
- 60 LEDs per mtr
- IP20 rating
- Multiple applications for commercial and residential environments
- Maximum powered from one end 10M

INTELLIGENT TEMPERATURE CONTROLLED SPECIFICATION

| Part Code | C0-TC-28-2-60-F12-20-FP | D0-TC-28-2-60-F12-20-FP | F0-TC-28-2-60-F12-20-FP |
|---------------------|-------------------------|-------------------------|-------------------------|
| Voltage | 24VDC | 24VDC | 24VDC |
| Power Consumption | 8.5W/M | 8.5W/M | 8.5W/M |
| LED Qty | 60 per mtr | 60 per mtr | 60 per mtr |
| Cuttable | Every 100mm | Every 100mm | Every 100mm |
| Colour | 3000K | 4000K | 6000K |
| PCB Width | 12mm | 12mm | 12mm |
| Luminous Flux | 995lm/M | 995lm/M | 995lm/M |
| CRI | 80Ra | 80Ra | 80Ra |
| IP Rating | IP20 | IP20 | IP20 |
| Working temperature | -20°C ~ +60°C | -20°C ~ +60°C | -20°C ~ +60°C |
| Working Humidity | 40% ~ 70% RH | 40% ~ 70% RH | 40% ~ 70% RH |
| Dimensions | 10,000 x 12mm | 10,000 x 12mm | 10,000 x 12mm |



Mechanical



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POWERLED TRADEMARKS

Introduction

A large percentage of mass produced LED Flexible strip within the lighting industry commonly delivers unnecessary additional heat of which is caused by over driving LEDs to achieve greater light output. For most manufacturers meeting an impressive output at a very attractive price brings ultimate value for marketing and quicker gains for the business. The higher end of the product quality spectrum now boasts newer technology including intelligent Temperature compensation heat dissipation that directly applies to the area the LED is installed and the ambient temperature of the product.

Excessive heat generated within the product will only lead to a detrimental effect on the lifetime of the LED itself and a reduction in quality via the products performance. Now ask yourself the question, would you rather purchase a product with higher output quality and a longer lifespan over a cheaper alternative?

Safety is paramount and should also be a key consideration when purchasing a premium product. Potential safety issues are not something you want to have to worry about when purchasing. Potential overheating from the PCB for example is an essential issue you want to avoid all together. With cabinetry, furniture and retail applications as key touch points for consumer's everyday lives, it is fundamental that products meet industry standard risk assessments and go above and beyond to avoid potential tragedy.

Definitions

ITM Intelligent Temperature Monitoring®

Tag - 'Monitors PCB temperature to ensure heat and current remain within safety parameters'



Smart Intelligent Temperature Monitoring (ITM) circuitry constantly monitors and brings a counterbalance threshold to the PCB, this therefore ensures that the PCB temperature does not exceed the pre-set temperature safety parameters. Smart monitoring also measures the PCB temperature constantly and activates the ICC circuitry should in any event the PCB rise above 60°C.

ICC Intelligent Current Control®

Tag - 'Smart Current adjustment to automatically control LED Current'



Intelligent Current Control (ICC)® delivers in conjunction with the ITM® circuitry to automatically decrease the current to the LED and reduce the heat and light output. At PowerLed we pre-set the maximum PCB temperature at 60°C and upon the internal IC detecting the temperature rising beyond environmental conditions the ICC® circuitry will immediately reduce the current. Reducing the current will then reduce heat output and the unit can then maintain a safe operating temperature.

Customised temperature parameters can be pre-set to 40°C / 50°C / 80°C to suit the application (MOQ Required).

ATC Automatic Temperature Control®

Tag - 'Temperature control constantly monitors PCB Temperature and automatically adjust the LED Current'



Automatic temperature control (ATC)® ensures the safe installation of LED Flexible strip in areas where additional environmental temperatures may well see the unit heat build and therefore make the dissipation of heat from the LED itself difficult. Temperature control is achieved by the addition of bespoke integrated circuits that have been developed through the PowerLed product research and development program. ATC should be specified in applications where excessive heat is likely to impact the installation at any point during the unit's lifetime.

Applications - Retail environments, furniture and wood surfaces enclosed spaces.

ACR Adaptive Current Rollback®

TAG - 'Constant monitoring and adjustment of the LED Current ensures PCB does not exceed temperature safety parameters.'



Adaptive Current Rollback® (ACR) circuits control the current for the unit in question and deliver reduction to ensure the LED to work within pre-set safety temperature parameters. ACR° will recover the current once the temperature reduces and meets the required parameter. Added LED intelligence allows peace of mind for installers of public applications.

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