



## DESCRIPTION

The SLIM 30W LED driver is designed to generate one constant current output from an AC input and work with industry standard lighting controls in Trailing Edge dimming applications.



THREE YEAR  
WARRANTY



LED  
LIGHTING



## KEY FEATURES

- Input Range: 220-240V<sub>AC</sub>
- Constant Current Output 700mA
- Active Power Factor Correction
- Trailing Edge (Reverse Phase) Dimmable
- Compact Encapsulated Assembly
- Wide Operating Temperature Range up to 90°C T<sub>c</sub>
- ENEC Approved, CE Mark
- Independent SELV Control gear
- RoHS Compliant



## APPLICATIONS AND BENEFITS

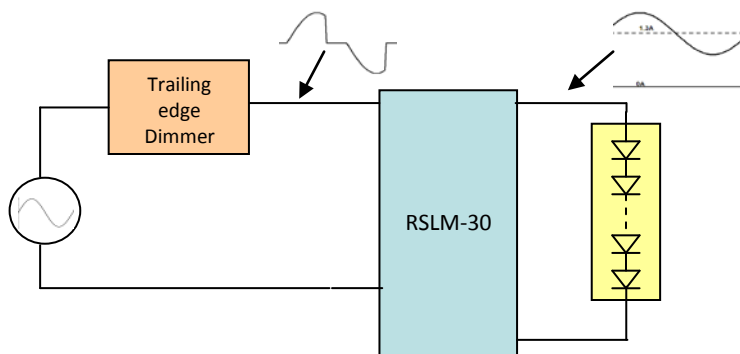
The SLIM 30W is designed for powering LED luminaries. The modules operate with:

- Standard Light Switches
- Electronic Low Voltage Dimmers (Reverse Phase – trailing edge)

The SLIM 30W is ideal for installations requiring dimmable outputs such as:

- General Indoor Lighting
- Commercial Lighting
- Residential Lighting

The following diagram depicts a typical installation utilizing the RSLM-30A:



Output Control: Output Dims without any flicker.

Conduction Angle / output: 180 degrees/ 100% max  
30 degrees / 10% min

- Dimming range down to 10% output current
- Output current does not terminate during off time of dimmer
- Multiple Drivers / LED Assemblies may be connected to a single dimmer

Refer to the following list for tested interfaces: WUYUN (W13-G162), HYTRONIK(HD1260)


**MODEL CODING AND OUTPUT RATINGS**

| Model number    | I <sub>out</sub><br>Max | P <sub>out</sub><br>max | V <sub>out</sub><br>(min) | V <sub>out</sub><br>(max) | V <sub>out</sub><br>(No Load) |
|-----------------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------------|
|                 | <i>mA</i>               | <i>W</i>                | <i>V<sub>DC</sub></i>     | <i>V<sub>DC</sub></i>     | <i>V<sub>DC</sub></i>         |
| <b>RSLM-30A</b> | 700                     | 29.4                    | 15                        | 42                        | 48                            |

**Table 1: Absolute Maximum Driver Ratings**

**INPUT AND OUTPUT SPECIFICATION**

| Specification           | Test Conditions / Notes                       | Min | Nom     | Max  | Units           |
|-------------------------|---|-----|---------|------|-----------------|
| <b>AC Input Voltage</b> |   | 211 | 220-240 | 264  | V <sub>AC</sub> |
| <b>Input Frequency</b>  |   | 47  | 50/60   | 63   | Hz              |
| <b>Input Current</b>    | 230V <sub>AC</sub> Rated Load                 | -   | -       | 0.15 | A               |
| <b>Power Factor</b>     | 230V <sub>AC</sub> Rated Load                 | 0.9 | -       | -    | -               |
| <b>THD</b>              | 230V <sub>AC</sub>                            | -   | -       | 20   | %               |
| <b>Inrush Current</b>   | 230V <sub>AC</sub> Half Value time: 100μs     | -   | -       | 17   | Apk             |
| <b>Efficiency</b>       | 230V <sub>AC</sub> Rated Load                 | -   | 86      | -    | %               |
| <b>Harmonic Current</b> | Complies with EN-61000-3-2, Class C load >25W |     |         |      |                 |



**OUTPUT SPECIFICATIONS**

| Specification              | Test Conditions / Notes                           | Min | Nom | Max  | Units             |
|----------------------------|---|-----|-----|------|-------------------|
| <b>Output Power Rating</b> |   | -   | -   | 29.4 | W                 |
| <b>Output Voltage</b>      |   | 15  |     | 42   | V                 |
| <b>Output Current</b>      |   | -   | 700 | -    | mA                |
| <b>Ripple Current</b>      | All models measured (I <sub>out</sub> _Pk-pk/RMS) | -   | -   | 40   | %                 |
| <b>Output Regulation</b>   |   | -   | -   | ±7   | %I <sub>out</sub> |
| <b>Start-up time</b>       | With no dimmer connected                          | -   | -   | 500  | ms                |


**PROTECTION FEATURES**

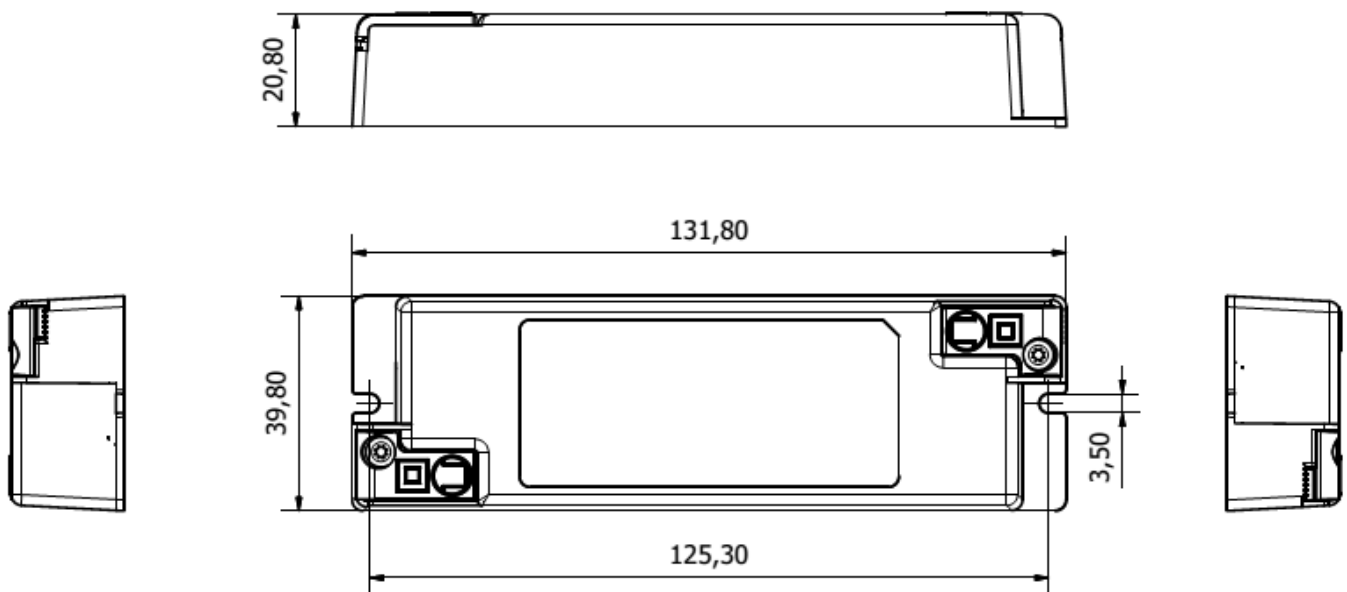
| Specification                         | Test Conditions / Notes                                      | Min | Nom | Max | Units             |
|---------------------------------------|--|-----|-----|-----|-------------------|
| <b>Output Over Voltage</b>            |  | 110 | -   | 130 | %V <sub>MAX</sub> |
| <b>Output Short-Circuit</b>           | Hiccup, auto Recovery  | -   | -   | -   | -                 |
| <b>Over-Temperature Tc</b>            | Auto Recovery if the PSU exceeds the rated Tc temperature    |     | 90  |     | °C                |
| <b>No Load</b>                        | Check No Load Voltage in Table 1                             |     |     | 48  | V                 |
| <b>Isolation Primary-to-Secondary</b> | Reinforced/double Insulation meets IEC/EN61347-2-13 Class II |     |     |     |                   |

**MECHANICAL DETAILS**

- Packaging Options: Plastic body enclosure
- I/O Connections: 2-pin Push in connectors; strip wire to 8-9mm;  $\Phi$  0.4-0.75mm
- Mounting Details: 2 Fixing holes for screws.
- Ingress Protection: IP20 Rated
- Independent SELV Control-gear when caps are mounted 

**OUTLINE DRAWINGS****Package: RSLM-30**

- Weight: 127g = 0.28lb
- Dimensions: 132 x 40 x 21mm  
5.19 x 1.57 x 0.82in




**ENVIRONMENTAL SPECIFICATIONS**

| Specification                      | Test Conditions / Notes  | Min | Nom | Max | Units |
|------------------------------------|--|-----|-----|-----|-------|
| <b>Top Case Temperature Range</b>  | Top case temperature without derating  | -20 | -   | 90  | °C    |
| <b>Ambient Temperature Range</b>   | As long as Tc temperature is within the limits   | -20 | -   | 50  | °C    |
| <b>Storage Temperature</b>         |  | -40 | -   | 70  | °C    |
| <b>Operating Relative Humidity</b> | Non-condensing   | 5   | -   | 95  | %     |
| <b>Surface Temperature</b>         | Exposed surfaces temperature under all operating conditions  | -   | -   | 90  | °C    |
| <b>Cooling</b>                     | Convection cooled  |     |     |     |       |
| <b>Shock EN 60068-2-27</b>         | Operating: Half sine, 30 g, 18 ms, 3 axes, 6x each (3 positive and 3 negative).<br>Non-Operating: Half sine, 50 g, 11 ms, 3 axes, 6x each (3 positive and 3 negative). |     |     |     |       |
| <b>Vibration EN 60068-2-64</b>     | Operating: 5 – 500Hz, 1gRMS (0.02 g <sup>2</sup> /Hz), 3 axes, 30 min.<br>Non-Operating: 5 – 500Hz, 2.46gRMS (0.0122 g <sup>2</sup> /Hz), 3 axes, 30 min.              |     |     |     |       |
| <b>Vibration EN 60068-2-6</b>      | Operating Sine, 10 – 500Hz, 1g, 3 axes, 1 oct/min., 60 min.  |     |     |     |       |
| <b>MTBF</b>                        | Typical Load, 50°C Ambient, MIL.HDBK-217E  | -   | 70k | -   | Hours |
| <b>Useful Life</b>                 | Nominal V <sub>AC</sub> , 40°C Ambient Rated Load  | -   | 40k | -   | Hours |







**ELECTROMAGNETIC COMPATIBILITY (EMC) – EMISSIONS**

| Phenomenon                                      | Conditions / Notes         | Standard    | Performance Class |
|---|----------------------------|-------------|-------------------|
| <b>Conducted Emission</b>                       | Test at 230V <sub>AC</sub> | EN55015     | -                 |
| <b>Radiated Emission</b>                        | Test at 230V <sub>AC</sub> | EN55015     | -                 |
| <b>Harmonic Current Emissions</b>               |                            | EN61000-3-2 | Class C           |
| <b>Voltage Changes, Fluctuation and Flicker</b> |                            | EN61000-3-3 |                   |


**ELECTROMAGNETIC COMPATIBILITY (EMC) – IMMUNITY**

| Phenomenon  | Conditions / Notes | Standard      | Note |
|---|--------------------|---------------|------|
| <b>Equipment for general lighting purposes -EMC Immunity Req.</b> |                    | EN 61547      |      |
| <b>ESD (Electrostatic Discharge)</b>                              |                    | EN 61000-4-2  |      |
| <b>Radiated Radio-Frequency electromagnetic field</b>             |                    | EN 61000-4-3  |      |
| <b>Electric Fast Transient / Burst</b>                            | Level ±1.0kV L-L   | EN 61000-4-4  |      |
| <b>Surge</b>  | Level ±1.0kV L-L   | EN 61000-4-5  |      |
| <b>Conducted disturbances induced by Radio-Frequency fields</b>   |                    | EN 61000-4-6  |      |
| <b>Voltage Dips, short interruptions and Voltage Variations</b>   |                    | EN 61000-4-11 |      |


**SAFETY AGENCY APPROVALS**

| Certification Body  | Safety Standards   |
|---|--|
|  | IEC/EN 62384 Electronic control gear for LED modules – Performance Requirements.<br>IEC/EN, 61347-1, IEC/EN 61347-2-13 Electronic control gear for LED Modules – Safety.   |
|  | To obtain the “CE Declaration of Conformity” please contact <a href="mailto:info@efore.com">info@efore.com</a>   |
|  | IECEE CB Certified, IEC/EN, 61347-1, IEC/EN 61347-2-13 electronic control gear for LED Modules.<br>All models are isolated control gears, SELV equivalent, with internal reinforced insulation as per IEC/EN 61347-2-13. |
|  | Reinforced/double Insulation meets IEC/EN61347-2-13 Class II   |
|  | Independent SELV Control gear when caps are mounted  |

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