

SM 64 WATT STREET LIGHT DRIVERS (V3.0)

REVISION HISTORY

NAME	DATE	REASON FOR CHANGES	VERSION
ON-SEMI 64 WATT STREET LIGHT DRIVER BOARD	25/02/2012	PWM INTERFACE WITH GSM/ZIGBEE/RTC/MANUAL	REV 3.0

STREET LIGHT



DRIVER BOARD



❖ INTRODUCTION

The NCL30001 is a highly integrated controller for implementing Power factor Correction (PFC) and isolated step down Ac-Dc power Conversion in a single stage, resulting in a lower cost and reduced part Count Solution. This controller is ideal for LED Driver power supplies with power requirements between 40 W and 150 W. The single stage is based on the Flyback converter and it is designed to operate in Continuous conduction (CCM).

❖ FEATURES

- Voltage feed forward Improves Loop Response.
- Frequency Jittering Reduces EMI Signature
- Proprietary Soft-Skip at Light Loads Reduces Acoustic Noise
- Independent Latch Off Input Facilitates Implementation of
- Over voltage and Over temperature Fault Detectors
- Adjustable Operating Frequency from 20 kHz to 250 k
- These Devices are Pb-Free and are RoHS Compliant
- PWM dimming secondary side
- PWM Dimming Interface With GSM/ZigBee/RTC/Manual

❖ SPECIFICATIONS

- Extended Input Voltage: 90-305VAC (with proper X&Y cap rating)
- Input Frequency 47-63Hz
- Power Factor: >0.9(50-100% of Load)
- Harmonic content EN6100-3-2 Class C Compliance
- Efficiency: >85% at 50-100% Load

❖ PROTECTIONS

- Short circuit protection
- Open circuit protection
- Over Current Protection-Auto recovery(optional)
- Over Voltage protection-Latched (optional)
- Over Temperature Fold back/latched (Optional)

❖ POWER SUPPLY SECTION

- Input Voltage: 85-280VAC
- Output power: 40-150Watt

❖ APPLICATIONS

- LED Street Lights
- Low Bay LED Lighting
- High Power LED Drivers
- Architectural LED Lighting.