

NCL31000

Intelligent LED Driver, Visible Light Communication capable, with Precision Dimming, Diagnostics and Power Metrology



The NCL31000 is an intelligent LED driver targeting luminaire applications, including capabilities for Visible Light Communication and Indoor Positioning. The NCL31000 incorporates a high efficiency buck LED driver that supports both high-bandwidth analog and PWM dimming down to zero current. Two auxiliary DC-DC converters are included to power a microcontroller and other sensors. Diagnostics are included to measure input and output current and voltage, LED temperature and DC-DC voltages.

The [NCL31001](#) is a reduced-feature version to enable multi-channel solutions.

- High efficiency buck LED driver
 - Visible Light Communication capable (50kHz bandwidth)
 - High accuracy metrology (+-1%) integrated
 - Integrated 3.3V buck converter
 - Adjustable 2.5 to 24V buck converter
 - I2C or SPI serial interface
 - Deep dimming to zero with 0.1% accuracy
 - Enables Indoor Positioning through VLC
 - Low EMI design
 - Protection against LED shorts, opens and over temperature
 - Diagnostic functions to measure voltages and currents
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- LED Lighting
 - Visible Light Communication
 - Indoor Positioning
 - Intelligent LED Luminaries
 - Managed LED Lighting Systems
 - Multi-channel LED Lighting

	Pricing (\$/Unit)	Compliance	Status	V _i Max (V)	I _o Max (mA)	LEDs in Series, Max #	LEDs in Parallel, Max #	Package Type
NCL31000MNITWG	3.1395	Pb H	Active	57	3000	13	16	QFN-48
NCL31000MNSWG	3.1395	Pb H	Active	57	3000	13	16	QFN-48