JOY TO YOU!
SENSE OF LIGHT

NC LED

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NC LED

GyeongGi-Do

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Joy to you ! Sense of Light.

As a leading manufacturer of high-quality LED modules in Korea, NC LED has gained high market shares and accumulated good reputation and credibility by offering excellent quality products at a competitive price and prompt customer service.

We began overseas marketing in 2009, and since then, we have been exporting our products to Europe, American countries, etc. Further, we've been attempting to satisfy customer demands by providing products of the best possible quality at a competitive price.

NC LED takes responsibility for the entire manufacturing process of "Design to Package" including product QC, in order to provide better quality products by effective process management.

Encouraged by the successful operation of the LED module business, NC LED has expanded its business scope through continuous investment in R&D to offer various other LED solutions. Our newly announced LED Tube and LED Canopy Lighting have been received well in the market, and we are preparing for the full-scale introduction of these products in the market. In addition, we are confident that our newly launched LED dedicated power supply will be the best of its kind and will optimize the performance of our products.

Get your market successfully with NC LED*!*

Business Area

LED Module
We proudly offer various types of LED modules such as constant-current modules, non-polar modules and resistant type of modules, etc., which satisfy the customer's various requirement for market characteristics. We provide our customers with top-notch products that are designed by our technologies and know-how accumulated over the years.

Constant Voltage SMPS
To provide NC LED's Constant-voltage SMPS will be the best solution which can offer better optimized LED application environment to our customers.

LED TUBE
As a best substitute for conventional Fluorescent lamps, NC LED's LED Tube will offer you excellent light diffusion, of course with remarkable energy saving. This product can be essential choice as a big wave to LED especially in European countries where Carbon Dioxide reduction has been mandated. Our LED Tubes are SMPS type which is more reliable and safer than AC direct connection type when it comes to the stability.

LED CANOPY
To replace the conventional Metal halide lamps for many public places and industrial area, this Canopy lighting could be the outstanding solution for sure. According to the data, you can save up to 75% of expenses to maintain the lightings compare with the conventional Metal halide lamps.

The Secure Choice for Eco-friendly LED Solutions

LED MODULE
Signage & Scenery Lighting

LED TUBE
Green substitute of Fluorescent lamps

TOTAL LED SOLUTION

LED dedicated SMPS
Optimized for LED Lighting Solutions

LED CANOPY
Gas station Lights
Tunnel Lights
Parking lot /
High ceiling Lights

History

2006

Jun. Established LEDpia

Dec. Found a factory in Gwangmyeong-si, Gyeonggi-do, Korea
Started the production and distribution of LED Modules for Signage

2007

Jan. Changed the company name to NCLEDpia

May. Completed development of high-intensity white and R,G,B colored LED modules

Aug. Incorporated the company under the name of NCLEDpia Co., Ltd.

2008

Feb. Moved the factory to Namyangju-si, Gyeonggi-do, Korea

Sep. Extended the Namyangju factory and constructed mass production systems for monthly
capacity of 1.5 million LED modules
Being selected as a "Venture enterprise" by KIBO(Korea Technology Credit Guarantee Fund)
Obtained IP68 Waterproofing test report for LED modules

Dec. Applied the registration of a utility model for Sign LED Module.
Applied the patent of light-diffusion LED module PCB board
Applied the registration of a utility model for the LED Module for Easy Color Change of Exposing
Light
Applied the registration of a utility model for lighting devices equipped with LED panels.

2009

Jan. Obtained ISO 9001 : 2008
Applied the registration of the designs of LED Modules
Applied the registration of the designs of LED lamps
Applied the registration of a utility model for LED lamps

Jun. ~ current:
Participated in various LED signage and lighting exhibitions in many countries to develop
overseas market

Sep. Obtained CE Certification of LED Modules for Signage

Nov. Moved the factory to the newly constructed buildings in Namyangju city and equipped the
automative production system for 3 million pcs a month

2010

Feb. Obtained UL Certification of LED Modules for Signage

Jun. Application for CE and domestic certification of LED dedicated SMPS is planned.

Key Technologies

Constant Current

Constant current is a system that can be used to change the voltage so that constant current is maintained in
the electronic circuit.
NC LED's Constant Current Drive maintains constant lighting luminance even after prolonged use, by delivering
the same voltage to each of fifty modules, which can be connected in series.

Non Polarity

Non polarity offers a non-polar design that nullifies the effect of polarity in electronic parts and maximizes
convenience at the working sites by allowing workers to connect cables without having to consider the polarity.

Wire to wire connection

Cable connections in all modules from NC LED are established by wire-to-wire connections instead of
soldering; this minimizes the current drop when current travels through the PCB and ensures complete cable
connectivity in our modules.

Certification

ISO 9001 : 2008 / CE for LED Modules / UL for LED Modules / IP68 Water & Dust protection test report

LED MODULE SERIES   Mono colors (DC12V)

ECO SERIES

Best Efficiency with reasonable price

Product Features

Resistant type of LED modules
- Very competitive price for price-sensitive market
- Minimized current drop through wire to wire connection
- Perfect protection from water & dust with IP68 rating
- Reverse voltage / current protection
- 50,000hr life time LED
- Better silluette with 120° Viewing angle
- 3chip 5450 SMD LED mounted

HLC SERIES

Qualified modules which is a Best-seller   CE c(UL)us

Product Features

The most preferred module series with Constant current drive (CE, UL Approved)
- Constant current drive, The most popular module series
- Minimized current drop through wire to wire connection
- Perfect protection from water & dust with IP68 rating
- Reverse voltage / current protection
- 50,000hr life time LED
- Better silluette with 120° Viewing angle
- 3chip 5450 SMD LED mounted

NCP SERIES

Premium modules for the best convenience

Product Features

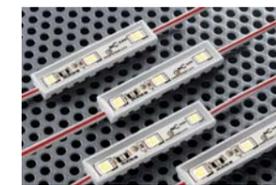**Constant current drive + Non Polarity**
- Constant current drive + Non Polarity
- Minimized current drop through wire to wire connection
- Perfect protection from water & dust with IP68 rating
- Reverse voltage / current protection
- 50,000hr life time LED, Better silluette with 120° Viewing angle
- 3chip 5450 SMD LED mounted

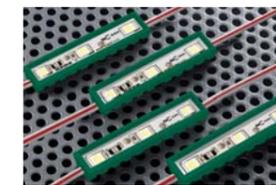## LED MODULES   Mono colors (DC12V)

NC's Design Tip

LED colors are very easy-recognizable through its body color. This practical and smart design will help the customers and end-users get the convenience in their work site. Feel the difference with NC LED!

White LED	Red LED	Green LED	Blue LED

Dimention and Technical specification

Model No. : ECO4, NCP4 [Square Type]
- Color : White, Red, Green, Blue
- Operating Voltage / Current : 12V, 80mA
- LED Pitch : 25mm
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 45(L) X 45(W) X 8(H)mm
- Watts : 1.44W per module
- Max.connection in series : 50modules

Model No. : ECO3, HLC3, NCP3
- Color : White, Red, Green, Blue
- Operating Voltage / Current : 12V, 60mA
- LED Pitch : 40mm
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 96(L) X 15(W) X 7(H)mm
- Watts : 0.72W per module
- Max.connection in series : 50modules

Model No. : ECO3S, HLC3S, NCP3S
- Color : White, Red, Green, Blue
- Operating Voltage / Current : 12V, 60mA
- LED Pitch : 25mm
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 66(L) X 15(W) X 7(H)mm
- Watts : 0.72W per module
- Max.connection in series : 50modules

Model No. : ECO2, HLC2, NCP2
- Color : White, Red, Green, Blue
- Operating Voltage / Current : 12V, 40mA
- LED Pitch : 25mm
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 66(L) X 15(W) X 7(H)mm
- Watts : 0.48W per module
- Max.connection in series : 50modules

Model No. : ECO2S, HLC2S, NCP2S
- White, Red, Green, Blue
- Operating Voltage / Current : 12V, 40mA
- LED Pitch : 25mm
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 38(L) X 12(W) X 7(H)mm
- Watts : 0.48W per module
- Max.connection in series : 50modules

Model No. : ECO1, HLC1, NCP1
- Color : White, Red, Green, Blue
- Operating Voltage / Current : 12V, 20mA
- 5500mcd, 15.6 lumens for white colored LED
- Dimension : 26(L) X 15(W) X 7(H)mm
- Watts : 0.24W per module
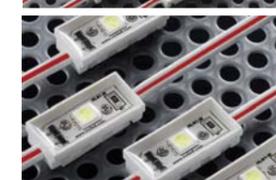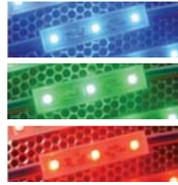- Max.connection in series : 50modules

LED MODULE SERIES — RGB colors (DC12V)

Product Features

- 160,000 Full color RGB Module
- Reverse voltage/ current protection
- 3-in-1 type RGB LED mounted (made in Korea, Samsung is available)
- IP68 rating for perfect protection against moisture and dust
- 50,000 hr LED life time, Better silhouette with 120° viewing angle and remarkable light diffusion
- Powerful RGB Controller and SMPS are also available to be provided for total solution.

Model No. : RGB4 (Square type)

- Dimension : 45(L) X 45(W) X 8(H)mm
- Watts : 1.2W per module
- Max.connection in series : 50modules
- Operating Voltage / Current : 12V, 80mA
- LED Pitch : 28.5mm

Model No. : RGB3

- Dimension : 66(L) X 15(W) X 7(H)mm
- Watts : 0.72W per module
- Max.connection in series : 50modules
- Operating Voltage / Current : 12V, 60mA
- LED Pitch : 25mm

RGB Controller — Model No. CTM-300 [DC12V]

Product Features

- Full color RGB, 8 mode pre-programmed
- Master / Slave alternative, Convenient Functional button
- Compact size, Easy installation make versatile application
- Optimized SMPS for LED total solution is provided (optional)
- Max. 24H display available with RS485 communication
- Easy speed control
- IP67 waterproof rating

- Dimension : 70©™ * 13mm
- Max. Current : 18A
- Max. connection in series : RGB3 300pcs, RGB4 150pcs per each controller
- 24 controllers are connectable

LED MODULE SERIES — Aluminum Modules (DC12/ 24V)

Application

- Billboards & Light boxes for Advertisement
- Display lighting for show case or various shop decoration

Strength

- Versatile body length for application variation
- Maximized heat release with Aluminum body
- 15meters can be connected in series (NCAL BAR-12)

Model No.	Color	Dimension	Operating Voltagein	Operating current	Watts	Lumens	Max.connection series
NCAL BAR-2	W,R,G,B	7.2TX15WX68L mm	DC12V	40mA	0.48W	31	50 modules
NCAL BAR-3S	W,R,G,B	7.2TX15WX68L mm	DC12V	60mA	0.72W	47	50 modules
NCAL BAR-6	W,R,G,B	7.2TX15WX250L mm	DC24V	60mA	1.44W	94	50 modules
NCAL BAR-12	W,R,G,B	7.2TX15WX490L mm	DC24V	120mA	2.88W	187	30 modules
NCAL BAR-24	W,R,G,B	7.2TX15WX970L mm	DC24V	240mA	5.76W	374	15 modules
NCAL BAR-36	W,R,G,B	7.2TX15WX1450L mm	DC24V	360mA	8.64W	562	10 modules
NCAL BAR-48	W,R,G,B	7.2TX15WX1930L mm	DC24V	480mA	11.52W	749	7 modules

LED Stick — LED Aluminum Stick [DC12V]

Application

- Display lighting for show case or various shop decoration
- Lighting for advertisement panel
- Indirect lighting for Versatile interior application
- Shelf illumination for shops, department store

Strength

- High luminosity with dense spacing of LED, 30 LEDs per 50cm length
- Maximized heat release & waterproofing with Aluminum body
- Easy installation

Model No.	LED STICK 7.2W					LED AL STICK 7.2W				
Color	W	R	G	B	AB	W	R	G	B	AB
Operating Power	DC 12/ 24V					DC 12/ 24V				
Power / Current Dissipation	7.2 W, 600mA /300mA (5450 LED)					7.2 W, 600mA /300mA (5450 LED)				
Number of LED per 500mm	30 LED (White)					30 LED (White)				
Dimension	500(L)X6(W)X3.4(H) mm					500(L)X10(W)X6(H) mm				
Cuttable Unit	Every three LED, 5cm					N/A				
Max. Connection in Series	2 meter (4ea)					2 meter (4ea)				
LED Spec	120° Viewing angle, 50,000hr rated life, made in Korea					120° Viewing angle, 50,000hr rated life, made in Korea				
Luminous intensity(cd)	165	63	108	24	63	165	63	108	24	63
Luminous intensity(lm)	468	178	305	68	178	468	178	305	68	178
Dominent Wavelength	-	625	525	460	-	-	625	525	460	-
Standard Color Temperature	6,500	-	-	-	-	6,500	-	-	-	-
Module connection & Cuttability	Soldering connection, every three LED on cutting mark					Soldering connection, every three LED on cutting mark				
Operating Temperature	-20°C~ 60°C					-20°C~ 60°C				
Storage Temperature	-30°C~ 70°C					-30°C~ 70°C				
Waterproofing rate	Non Waterproofing					IP67				
Case Materials	PCB + Soldering connection					PCB + Aluminum body + Epoxy treatment				

LED MODULE SERIES — AC Modules (AC90~240V)

Product Features

- Operated by 100 / 220V AC power, brings you convenience for the installation
- No extra converter, No extra expenses
- Best stability and Luminosity through Constant current drive
- Safety Fuse built-in" to prevent fire incidents
- Every module is available to be cut & changed
- IP68 rating for perfect protection against moisture and dust
- Reverse voltage / current protection
- 50,000hr life time LED, Better silhouette with 120° Viewing angle
- 3chip 5450 SMD LED mounted

Model No. : NCAC4

- Color : White, Red, Green, Blue
- Dimension : 45(L) X 45(W) X 1(H)mm
- Watts : 0.92W per module, LED Pitch : 28.5mm
- Max.connection in series : 250modules

Model No. : NCAC2

- Color : White, Red, Green, Blue
- Dimension : 66(L) X 19(W) X 11(H)mm
- Watts : 0.6W per module, LED Pitch : 40mm
- Max.connection in series : 300modules

SMPS — LED dedicated Power supply

Constant Voltage Power supply

The constant voltage LED power supplies from NC LED can deliver up to 200W of output power as maximum in an compact sized package.

75W / 100W

Features

- 88% High Efficiency
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- Wide input range 90~240VAC
- Optimized heat release with Aluminum body

Model No.	Input Current	Input Voltage	Output Voltage	OVP Max	Efficiency
NCP100-AU-12SS-CV	8.3A	90~240VAC	12VDC	18V	88.0%
NCP100-AU-24SS-CV	4.2A	90~240VAC	24VDC	32V	89.0%
NCP075-AU-12SS-CV	6.25A	90~240VAC	12VDC	18V	87.0%
NCP075-AU-24SS-CV	3.13A	90~240VAC	24VDC	32V	88.0%

Features

- 90% High Efficiency
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- Wide input range 90~240VAC
- Optimized heat release with Aluminum body

150W / 200W

Model No.	Input Current	Input Voltage	Output Voltage	OVP Max	Efficiency
NCP200-AU-12SS-CV	16.7A	90~240VAC	12VDC	18V	90.0%
NCP200-AU-24SS-CV	8.3A	90~240VAC	24VDC	32V	91.0%
NCP150-AU-12SS-CV	12.5A	90~240VAC	12VDC	18V	90.0%
NCP150-AU-24SS-CV	6.3A	90~240VAC	24VDC	32V	91.0%

LUXENCE LIGHTING — LED Tube [SMPS Type]

The best substitute for Fluorescent lamps

- Green solutions with eco-friendly LEDs
- DC Operated products through SMPS for its best stability, safety
- Energy saving solution with 87% High efficiency rate
- Remarkable Electricity & Maintenance cost reduction
- Gorgeous color and Light diffusion
- Excellent heat release through Aluminum body & specialized circuit design
- 70, 80 CRI. Colors are available for customers preference
- Reverse voltage / current protection

Model No.	LUXENCE-LED TUBE-22W	LUXENCE-LED TUBE-25W
Dimension (mm)	29 diameter X 1198 length (1212 including pin)	
Operating Power	SMPS TYPE (Output Voltage : 37.5V)	
LED Source	5450 3Chip SMD, 5500Kelvin, 50000hours life time	
Power Comsumption (W)	22	25
Output Current (A)	0.52	0.57
CRI(Ra)	70 / 80	70 / 80
Total Luminous flux [lm]	1950 / 1810	2220 / 2050
Lumen per Watt	80 / 74	80 / 74
Radiation Angle	120°Δ	120°Δ
Waterproofing	IP65	IP65
Operating Temp.	-20 ~ +40°C	-20 ~ +40°C
Materials	Aluminium+Poly Carbonate	Aluminium+Poly Carbonate
Weight (g)	350	350

LUXENCE LIGHTING — LED Canopy

Specialized Patrol station Lighting

- Green solutions with eco-friendly LEDs
- High efficient Energy savings up to 75%
- Power supply unit included
- Remarkable Electricity & Maintenance cost reduction
- The best substitute for Metal halide lamps
- Versatile application for high ceiling lighting

Model No.	LUXENCE-CA01-60W	LUXENCE-CA01-70W	LUXENCE-CA01-100W
Dimension (mm)	296WX278LX114T	296WX278LX114T	296WX388LX114T
LED Source	SMD 3ChipX324pkg	SMD 3ChipX400pkg	SMD 3ChipX600pkg
Operating Power	INPUT : 100~250VAC / 50,60Hz OUTPUT : 50~70DC 1A	INPUT : 100~250VAC / 50,60Hz OUTPUT : 50~70DC 1A	INPUT : 100~250VAC / 50,60Hz OUTPUT : 50~70DC 1A
LED Power Comsumption (W)	52.0	62.0	88.0
Power Comsumption (W)	60	70	100
Materials	Aluminium	Aluminium	Aluminium
Color Temp.	5000~6000 K	5000~6000 K	5000~6000 K
CRI(Ra).	70	70	70
Weight (kg)	4.3	4.3	4.6
Radiation Angle	110°	110°	110°
Waterproofing	IP65	IP65	IP65
Operating Temp.	-20 ~ +40°C	-20 ~ +40°C	-20 ~ +40°C
lm / w	79	81	81
Total Luminous flux [lm]	4680	5670	8100
Life Time [h]	50000	50000	50000