







Lighting up miracles.....











# About us

Nessa has been founded by people with vast global experience and alumni from IIT Bombay and IIM Ahmedabad. With focus on service and quality, It has grown to be one of the largest Industrial and outdoor lighting solution providers in India and abroad.

# **Global Network**



- Ethiopia
- Ghana
- Uganda
- NigeriaKenya
- •• UAE
- Bahrain
- Oman
- South Africa
- Sri-Lanka
- Bangladesh
- Nepal
- Australia

Dubai

USA

- Tanzania
- Myanmar
  - Bhutan













BIS

**CE Certificate** 

MNRE NISE

IS0

RoHS











IEC 61000

IEC 62031

LM - 79

Wind Test Report

IEC 60598

# Awards

- Economic Times Young Achiever Award 2018 by SIDBI in association with **Economic Times**
- Best Technology and sustainable Development Award by IIT Bombay
- Mother Teresa Excellence Award by integrated Council for Socio-Economic
- Top 7 companies in clean-tech selected by Power of Ideas in association with Economic Times
- Nominated for Award for Outstanding contribution to national Economic and Social Development by All India Business Development Association
- Pride of India Award 2015 for distinctive achievement in green energy field by Citizens Integration Peace Society
- Bharat Jyoti Award 2015 for distinctive achievement in industrial growth
- Awarded by Adani for promising vendor of the year

















# **O** AC LED Street Lights

PRODUCT CODE	NES-SL-18L	NES-SL-25L	NES-SL-30L	NES-SL-45
Watt	18W	25W	30W	45W
Input Range	110-290 V	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W	≥ 110 lm/W	≥ 110 lm/W
CRI	>70	>70	>70	>70
THD	<15%	<15%	<10%	<10%
Driver Efficiency	>85%	>85%	>85%	>85%
IP RATING	≥65	≥65	≥65	≥66
Dimension	(270X110X55)mm	(270X110X55)mm	(270X110X55)mm	(315X135X50)mm
Weight	0.66 kg	0.66 kg	0.66 kg	1.36 kg
ID	38mm	38mm	38mm	40mm

## Color





## **Application**

Residential Complex, Small trac round - about, Lighting of secondary roads / side roads, Parks & gardens, Security lighting

# **OMES** AC LED Street Lights

PRODUCT CODE	NES-SL-60L	NES-SL-75L	NES-SL-90
Watt	60W	75W	90W
Input Range	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W	≥110 lm/W
CRI	>70	>70	>70
THD	<10%	<10%	<10%
Driver Efficiency	>87%	>87%	>87%
IP RATING	≥66	≥66	≥66
Dimension	(255X160X65)mm	(255X160X65)mm	(375X200X50)mm
Weight	1.65 kg	1.65 kg	2.80 kg
ID	42 mm	42 mm	65 mm







## **Application**

City roads / Highways, Periphery / Security lighting, Industry campuses, Parking areas, Parks and Gardens









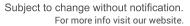
















# AC LED Street Lights

PRODUCT CODE	NES-SL-100	NES-SL-120	NES-SL-150
Watt	100W	120W	150W
Input Range	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥ 110 lm/W	≥110 lm/W
CRI	>70	>70	>70
THD	<10%	<10%	<10%
Driver Efficiency	>87%	>87%	>87%
IP RATING	≥66	≥66	≥66
Dimension	(440X195X100) mm	(440X195X100) mm	(440X195X100) mm
Weight	2.5 kg	2.5 kg	2.5 kg
ID	58 mm	58mm	58 mm

## Color



## Application

City roads / Highways, Periphery / Security lighting, Industry campuses, Parking areas, Parks and Gardens

# **OMES** AC LED Street Lights

PRODUCT CODE	NES-SL-200
Watt	200W
Input Range	110-290 V
Output Lumens	≥110 lm/W
CRI	>70
THD	<10%
Driver Efficiency	>87%
IP RATING	≥66
Dimension	(510x290x90)mm
Weight	6.25 kg
ID	60 mm



# **Application**





City roads / Highways, Periphery / Security lighting, Industry campuses, Parking areas, Parks and Gardens























# AC LED Flood Lights

PRODUCT CODE	NES-FL-30	NES-FL-45	NES-FL-60	NES-FL-75
Watt	30W	45W	60W	75W
Input Range	110-290 V	110-290 V	110-290 V	110-290 V
Output Lumens	≥100 lm/W	≥110 lm/W	≥ 110 <b>I</b> m/W	≥ 110 <b>I</b> m/W
CRI	>70	>70	>70	>70
THD	<10%	<10%	<10%	<10%
Driver Efficiency	>85%	>85%	>87%	>87%
IP RATING	≥66	≥66	≥66	≥66
Dimension	(185X154X48)mm	(285X240X60)mm	(325X185X150)mm	(325X185X150)mm
Weight	0.8 kg	1.7 kg	2.65 kg	2.65 kg

## Color





# **Application**

Lighting of small to medium sized billboards, Parking areas around building /residential complexes, General area lighting, Lighting of monuments.

# AC LED Flood Lights

PRODUCT CODE	NES-FL-100	NES-FL-120
Watt	100W	120W
Input Range	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W
CRI	>70	>70
THD	<10%	<10%
Driver Efficiency	>87%	>87%
IP RATING	≥66	≥66
Dimension	(400X230X140)mm	(400X230X140)mm
Weight	3.3 kg	3.3 kg







# **Application**

Lighting of small to medium sized billboards, Parking areas around building /residential complexes, General area lighting, Lighting of monuments.





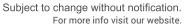
















# AC LED Flood Lights

PRODUCT CODE	NES-FL-150	NES-FL-180	NES-FL-200
Watt	150W	180W	200W
Input Range	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W	≥ 110 lm/W
CRI	>70	>70	>70
THD	<10%	<10%	<10%
Driver Efficiency	>87%	>87%	>87%
IP RATING	≥66	≥66	≥66
Dimension	(352X340X65)mm	(352X340X65)mm	(352X340X65)mm
Weight	5.28kg	5.28kg	5.28kg

## Color





## **Application**

Highmasts, Container berths, docks, ports, Airport aprons, flyovers & bridges, Railway marshalling yards, Security lighting, sport Lighting, Shopping malls and building facade.

# AC LED Flood Lights

PRODUCT CODE	NES-FL-250	NES-FL-300	NES-FL-350	NES-FL-400	NES-FL-500
Watt	250W	300W	350W	400W	500W
Input Range	110-290 V	110-290 V	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥ 110 lm/W	≥110 lm/W	≥110 <b>l</b> m/W	≥110 lm/W
CRI	>70	>70	>70	>70	>70
THD	<10%	<10%	<10%	<10%	<10%
Driver Efficiency	>87%	>87%	>87%	>87%	>87%
IP RATING	≥66	≥66	≥66	≥66	≥66
Dimension	(670X320X185)mm	(545X465X80)mm	(545X465X80)mm	(545X465X80)mm	(810x325x210)mr
Weight	11.0 kg	11.8kg	11.8kg	11.8kg	12.5 kg

# **Application**

Highmasts, Container berths, docks, ports, Airport aprons, flyovers & bridges, Railway marshalling yards, Security lighting, sport Lighting, Shopping malls and building facade.

## Color











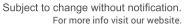


















# AC LED Highbay Lights

PRODUCT CODE	NES-BL-50	NES-BL-75
Watt	50W	75W
Input Range	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W
CRI	>70	>70
THD	<10%	<10%
Driver Efficiency	>87%	>87%
IP RATING	≥65	≥66
Dimension	D: 180 H:100 mm	(325X185X150)mm
Weight	1.45 kg	2.65 kg

## Color

# Warm White



# **Application**

Manufacturing bays, Warehouses, Indoor stadiums, Airport hangers, Railway concourse halls and Mines.

# AC LED Highbay Lights

PRODUCT CODE	NES-BL-100	NES-BL-120
Watt	100W	120W
Input Range	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W
CRI	>70	>70
THD	<10%	<10%
Driver Efficiency	>87%	>87%
IP RATING	≥66	≥66
Dimension	D: 375 H:125 mm	D: 375 H:125 mm
Weight	4 kg	4 kg



Color

# **Application**





Manufacturing bays, Warehouses, Indoor stadiums, Airport hangers, Railway concourse halls and Mines.



















# AC LED Highbay Lights

PRODUCT CODE	NES-BL-150	NES-BL-200
Watt	150W	200W
Input Range	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥ 110 lm/W
CRI	>70	>70
THD	<10%	<10%
Driver Efficiency	>87%	>87%
IP RATING	≥66	≥66
Dimension	D:320 H:115 mm	D:320 H:115 mm
Weight	3.86 kg	3.86 kg

## Color

# Warm White



# **Application**

Manufacturing bays, Warehouses, Indoor stadiums, Airport hangers, Railway concourse halls and Mines.

# **OMES** AC LED Well Glass

PRODUCT CODE	ENES-WELL-30	ENES-WELL-40	ENES-WELL-60	ENES-WELL-75
Watt	30W	40W	60W	75W
Input Range	110-290 V	110-290 V	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥ 110 lm/W	≥110 <b>l</b> m/W	≥110 lm/W
CRI	>70	>70	>70	>70
THD	<10%	<10%	<10%	<10%
Driver Efficiency	>85%	>85%	>87%	>87%
IP RATING	≥66	≥66	≥66	≥66
Dimension	D:170 H:160 mm	D:170 H:160 mm	D:220 H:220 mm	D:220 H:220 mm
Weight	1.12 kg	1.12 kg	2 kg	2 kg

Color

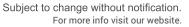




# **Application**

Industrial areas, Ware house, Manufacturing unit

























# **OMES** AC LED Flame Proof

PRODUCT CODE	NES-FLP-30
Watt	30w
Input Range	110-290 V
Output Lumens	≥110 lm/W
CRI	>70
THD	<10%
Driver Efficiency	>85%
IP RATING	≥65
Weight	6.35 kg



Color





**Application** 

Oil & Gas Industries, Cement Plant

# AC LED Canopy Light

PRODUCT CODE	NES-CAN-75	NES-CAN-200
Watt	75W	200 W
Input Range	110-290 V	110-290 V
Output Lumens	≥110 lm/W	≥110 lm/W
CRI	>70	>70
THD	<10%	<10%
Driver Efficiency	>87%	>87%
IP RATING	≥66	≥66
Dimension	(325X185X150)mm	(400X230X140)m
Weight	2.65 Kg	3.3 kg

## **Application**

Petrol and service stations, Parking area







# **Other Features:**

- Single Piece MCPCB with Thermal Pads
- High Pressure Aluminium DieCast
- PF ≥0.95
- 35°C Storage Temperature
- >50000 Hrs Working Life
- "Secondary optics for better light distribution."
- Driver Protection against Auto Shutdown & Auto Restart, Open & Short Circuit Protection, Over Voltage Protection
- Impact resistance: IK07
- Surge Protection: ≥4.5KV (Built in)
- Provide 10KV External Surge Protection (Separate, if Required)





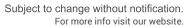














# **Fission LED Street Light**



PRODUCT CODE	ENES-SL-15	ENES-SL-24	ENES-SL-36	ENES-SL-45	ENES-SL-60	ENES-SL-75
Watt	15 W	24 W	36 W	45 W	60 W	75 W
Input Range	90 - 270 V					
Output Lumens	≥100 lm/W					
CRI	≥80	≥80	≥80	≥80	≥80	≥80
THD	<12%	<12%	<12%	<12%	<12%	<12%
Driver Efficiency	>85%	>85%	>85%	>85%	>87%	>87%
IP RATING	IP65	IP65	IP65	IP65	IP65	IP65

Subject to change without notification.

PRODUCT CODE	ENES-SL-90	ENES-SL-120	ENES-SL-150
Watt	90 W	120 W	150 W
Input Range	90 - 270 V	90 - 270 V	90 - 270 V
Output Lumens	≥100 lm/W	≥100 lm/W	≥100 lm/W
CRI	≥80	≥80	≥80
THD	<12%	<12%	<12%
Driver Efficiency	>87%	>87%	>87%
IP RATING	IP65	IP65	IP65



Subject to change without notification.

# **® Fission Flood Light**



PRODUCT CODE	ENES-FL-10	ENES-FL-20	ENES-FL-30	ENES-FL-50	ENES-FL-100	ENES-FL-150	ENES-FL-200
Watt	10 W	20 W	30 W	50 W	100 W	150 W	200 W
Input Range	90 - 270 V	90 - 270 V	90 - 270 V				
Output Lumens	≥100 lm/W	≥100 lm/W	≥100 lm/W				
CRI	>80	>80	>80	>80	>80	>80	>80
THD	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Driver Efficiency	>85%	>85%	>85%	>87%	>87%	>87%	>87%
IP RATING	IP65	IP65	IP65	IP65	IP65	IP65	IP65

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# Semi Integrated Solar **LED Street Light (Two in one)**

, , , , , , , , , , , , , , , , , , ,	PRODUCT CODE	NES-LION-12	NES-LION-15
Output Lumens       ≥ 110 lm/W       ≥ 110 lm/W         CRI       >70       >70         Driver Efficiency       >85%       >85%         IP RATING       ≥65       ≥65         Dimension       (250X105X115)mm       (250X105X115)mm	Watt	12W	15W
CRI       >70       >70         Driver Efficiency       >85%       >85%         IP RATING       ≥65       ≥65         Dimension       (250X105X115)mm       (250X105X115)mm	Solar Panel	40W	40W
Driver Efficiency       >85%       >85%         IP RATING       ≥65       ≥65         Dimension       (250X105X115)mm       (250X105X115)mm	Output Lumens	≥110 lm/W	≥110 lm/W
IP RATING ≥65 ≥65  Dimension (250X105X115)mm (250X105X115)mm	CRI	>70	>70
Dimension (250X105X115)mm (250X105X115)mm	Driver Efficiency	>85%	>85%
(2007/1007/10)//////	IP RATING	≥65	≥65
Weight 22 kg 22 kg	Dimension	(250X105X115)mm	(250X105X115)mm
3.2 kg	Weight	3.2 kg	3.2 kg
ID 42 mm 42 mm	ID	42 mm	42 mm







## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn | Fast charging | No battery theft | Maintenance free

PRODUCT CODE	NES-LIFE-12	NES-LIFE-15	NES-LIFE-18	NES-LIFE-24
Watt	12W	15W	18W	24W
Solar Panel	40W	40W	50W	75W
Output Lumens	≥ 110 lm/W	≥110 lm/W	≥110 lm/W	≥110 lm/W
CRI	>70	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%	>85%
IP RATING	≥66	≥66	≥66	≥66
Dimension	(410X145X140)mm	(410X145X140)mm	(410X145X140)mm	(410X145X140)mm
Weight	2.8 kg	2.8 kg	2.8 kg	3.5 kg
ID	54 mm	54 mm	54 mm	54 mm









## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn | Fast charging | No battery theft | Maintenance free





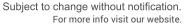












# Solar Products





# Semi Integrated Solar LED Street Light (Two in one)

PRODUCT CODE	NES-LIFE-30	NES-LIFE-45	NES-LIFE-60
Watt	30W	45W	60W
Solar Panel	75W	150W	150W
Output Lumens	≥110 lm/W	≥ 110 lm/W	≥ 110 <b>l</b> m/W
CRI	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%
IP RATING	≥66	≥66	≥66
Dimension	(410X145X140)mm	(410X145X140)mm	(410X145X140)mm
Weight	3.5 kg	4.9 kg	4.9 kg
ID	54mm	54mm	54mm







## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn | Fast charging | No battery theft | Maintenance free

# Ontegrated Solar Street Light (All in one)

PRODUCT CODE	NES-LIA-12	NES-LIA-15	NES-LIA-18
Watt	12W	15W	18W
Solar Panel	40W	40W	40W
Output Lumens	≥110 lm/W	≥110 <b>l</b> m/W	≥110 lm/W
CRI	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%
IP RATING	≥65	≥65	≥65
Dimension (mm)	(665X460X55)	(665X460X55)	(665X460X55)
Weight	9.8 kg	9.8 kg	9.8kg













## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn | Fast charging | No battery theft | Maintenance free



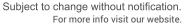












# Solar Products





# Ontegrated Solar Street Light (All in one)

PRODUCT CODE	NES-LIA-24	NES-LIA-30	NES-LIA-40
Watt	24W	30W	40W
Solar Panel	60W	60W	75W
Output Lumens	≥110 lm/W	≥110 lm/W	≥110 lm/W
CRI	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%
IP RATING	≥65	≥65	≥65
Dimension (mm)	(665X620X60)mm	(665X620X60)mm	(775X670X60)mm
Weight	10.6kg	10.6kg	12.38kg

## Color





## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn Fast charging | No battery theft | Maintenance free

# Integrated Solar Street Light (All in one)

PRODUCT CODE	NES-LIA-60
Watt	60W
Solar Panel	150W
Output Lumens	≥110 lm/W
CRI	>70
Driver Efficiency	>85%
IP RATING	≥65
Dimension (mm)	(1600X750X55)
Weight	28kg





# Color





## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn Fast charging | No battery theft | Maintenance free



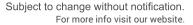
















# Solar LED Street Light

PRODUCT CODE	NES-SSL-12	NES-SSL-15	NES-SSL-18
Watt	12W	15W	18W
Solar Panel	40W	50W	75W
Battery	42 ah	42 ah	65 ah
Output Lumens	≥ 110 lm/W	≥ 110 lm/W	≥110 lm/W
CRI	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%
IP RATING	≥65	≥65	≥65
Dimension	(270X110X55)mm	(270X110X55)mm	(270X110X55)mm
Weight	0.66 kg	0.66 kg	0.66 kg
ID	38 mm	38 mm	38 mm

## Color

## **Driver Features**





Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn

# Solar LED Street Light

PRODUCT CODE	NES-SSL-24
Watt	24W
Solar Panel	75W
Battery	75 ah
Output Lumens	≥110 lm/W
CRI	>70
Driver Efficiency	>85%
IP RATING	≥66
Dimension	(270X110X55)mm
Weight	0.8kg
ID	35mm





Color

## **Driver Features**





Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn





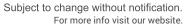


















# Solar LED Street Light

PRODUCT CODE	NES-SSL-30	NES-SSL-40	NES-SSL-60
Watt	30W	40W	60W
Solar Panel	100W	24V 200W	24V 250W
Battery	100 ah	2x12V 75ah	2x12V 100ah
Output Lumens	≥ 110 lm/W	≥110 lm/W	≥ 110 lm/W
CRI	>70	>70	>70
Driver Efficiency	>85%	>85%	>85%
IP RATING	≥66	≥66	≥66
Dimension	(315X135X50)mm	(395X220X70)mm	(395X220X70)mm
Weight	1.36 kg	2.80 kg	2.80 kg
ID	44 mm	60 mm	60 mm

## Color



## **Driver Features**

Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn Fast charging | No battery theft | Maintenance free

# Solar LED Street Light

PRODUCT CODE	NES-SSL-90
Watt	90W
Solar Panel	24V 400W
Battery	2x12V 200ah
Output Lumens	≥110 lm/W
CRI	>70
Driver Efficiency	>85%
IP RATING	≥66
Dimension	(440X195X100) mm
Weight	2.5 kg
ID	58 mm



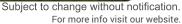




Intelligent dimming during monsoon | 2 Stage Battery Level Indication | Over Voltage Protection, Reverse Polarity Protection, Over Charging and deep Discharging Protection, Extra battery zero voltage protection | General Dimming also available | Charging and low battery indication | Dusk to Dawn Fast charging | No battery theft | Maintenance free

























# Solar Pump - NES-PMP

- Available in 1 HP to 50 HP
- Integrated MPPT (Maximum power point tracking)
- High efficient solar photovoltaic panels with minimum 25 year service life
- High sand protection
- High wear resistance
- Robust galvanize steel mounting structure
- Virtually no maintenance cost

## Features:

- Three phase low voltage and high voltage AC submersible pump
- MPPT VFD pump controller
- Low maintenance of pump
- AC motor
- Soft starter feature prevents water hammering and increases system life
- Easy to install
- GI structure with the manually movable option

HP	Stage	HEAD (m)	Discharge (Imp)	Total System (Watt)
2	6, 8, 9, 13	20, 30, 50, 70	244, 157, 93, 63	2100
3	3, 5, 12, 15	20, 30, 50, 70	350, 224, 133, 91	3000
5	4, 4, 7, 10	20, 30, 50, 70	560, 358, 212, 145	4800











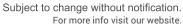












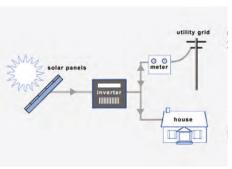


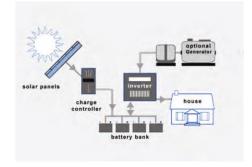


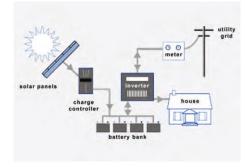
# Solar Power Packs

Nessa specializes in designing and installing solar power packs for industries, residential societies, individual house s, campuses etc. The system installation is done so as to offer maximum economic value to the customer.

Being MNRE channel partner, Nessa can help the customer avail subsidies as well as seamless and smooth service support.







## **Grid-tied Solar System**

On-grid or grid-tie solar systems are by far the most common and widely used by homes and businesses. These systems are connected to the public electricity grid and do not require battery storage. Any solar power that you generate from an on-grid system (which is not used directly in your home) is exported onto the electricity grid and you usually get paid a feed-in-tariff (FiT) for the energy that you export.

## Off-Grid Solar System

An off-grid system is not connected to the electricity grid and therefore requires battery storage. An off-grid solar system must be designed appropriately so that it will generate enough power throughout the year and have enough battery capacity to meet the home's requirements, even in the depths of winter when there is less sunlight. The high cost of batteries and inverters means off-grid systems are much more expensive than on-grid systems and so are usually only needed in more remote areas that are far from any electricity grid. However battery costs are reducing rapidly, so there is now a growing market for off-grid solar battery systems even in cities and towns.

## **Hybrid System**

Due to the decreasing cost of battery storage, systems that are already connected to the electricity grid can start taking advantage of battery storage as well. This means being able to store solar energy that is generated during the day and using it at night. When the stored energy is depleted, the grid is there as a back-up, allowing consumers to have the best of both worlds.

## **Applications**

























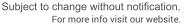
















# 9W: Rechargeable Bulb

Rated Wattage

Input Voltage 95-240V AC, 50HZ

Lumens 900LM 180° Beam Angel

**Operation Temp** -20~600C Color Temp 6500 K

**Battery Size** 3.7v, 2200mah Backup 4 HOURS **Battery Type** 

LI-ION BATTERY



# **Output** Tube Light

Watt	10W,18W,22W
Input Range	95V-295V AC
Output Lumens	>100 lm/W
CRI	>80
Driver Efficiency	>85%
PF	>0.95
Working Life	50000 Hrs
Dimensions	1ft, 2 ft, 4 ft

# **5W: DC Rechargeable Tube Light**

# **Specs**

Dimension 300X22X40mm Wattage 3W, 5W, 7W Solar Panel 9V 3W Battery Inbuilt Li-ion **Net Power Consumption** 5 ± 10% W LED Luminous Efficacy>= 115 lm/W

## Optical

Light Source OSRAM/EVERLIGHT

**Colour Temperature** 2700-6500 K

CRI >70

## **Environmental**

70° C Max. Temperature of Body 50°C Max. Ambient Temperature Working Life >50000 Hrs.

## **Accessories**

Light with in build battery and controller Mechanism, Solar Panel and adapter

















## 3 Different Model Available

- High Brightness tubelight
- High Back-up tubelight
- Long life tubelight

# **Application**

This portable Solar LED Tube light can be very useful during your camp, beach, backyard, or even at your house during an power outage. The light is also ideal for camping, reading, entertaining, in car or as an emergency light.

> Subject to change without notification. For more info visit our website.

# Indoor Light Products



# LED Spike Light

Watts	Luminous Flux	Dimension
(W)	(lm)	Φ*L(mm)
5W	420 <b>l</b> m	Ф58Х75



# © LED Surface Light (Square)

Watts	Dimension
6W	110x110x35
12W	160x160x35
15W	160x160x35
22W	215x215x35



# **LED Panel light** (Square)

Watts (W)	Dimension (mm)	Hole size (mm)
6W	120*120*21	100*100
12W	170*170*21	150*150
15W	170*170*21	150*150
22W	225*225*21	200*200



# LED Down Light

Watts	Luminous Flux	Dimension	Hole size
(W)	(lm)	Φ*L(mm)	(mm)
9W	900 lm	Ф90Х70	Φ75
16W	1600 <b>l</b> m	Ф110Х80	Ф95
30W	3000lm	Ф160Х85	Φ145



# LED Surface Light (Round)



# LED Panel light (Round)

Watts (W)	Dimension Ф∗L(mm)	Hole size (mm)
6W	Ф120*25	ф100
12W	Φ170*25	Ф150
15W 22W	Ф170*25 Ф225*21	Ф150 Ф200

# **Other Features**

Input Range	95V-240V
Operating Frequency	50Hz ±3%
Power Factor	>0.90
Efficiency	>85%
CRI	>80
Maximum Temperature of Heat Sink	65° C

Color Cool White, Warm White

Color Temperature 2700-7000 K

Beam Angle (led) 120°
Working Life 25000 Hrs
Internal Surge Protection 2.5KV

Body Aluminum Die Casting

Standard Warranty 2 Years
Luminaire Color White





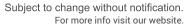












# **Other Outdoor Products**

# RGB Light & Wallwasher

Available up to 50w to 100w



Available up to 20W to 80W



# Traffic Blinker Light (NES-TBL-9)

LED Power Lumens Output Voltage Range Life 9W-12W 90 lm/W 90-275V AC 60,000 Hours





Blinkers avalaible in Red, Orange & Green

\*All Customize Solutions are Available

# Smart Lighting Solutions

As the world moves towards smart, easy to monitor and easy to operate systems, need for smart solution for lighting technology has arisen. This "Smartification" enables illumination or various urban areas precisely. It helps not only in reducing electricity consumption but also in increasing reliability of systems.

We specialize in smart lighting using GSM, GPRS, RF and Wifi technologies.

# Centralized monitoring and control of lights Cloud GPRS Betricity Feeder Papel Research Papel Remote Termina Unit

# @ 120W: Streetlight

PRODUCT CODE	NES-SL-120
Watt Output Lumens	120W >120 lm/W
CRI Driver Efficiency	>70 >87%
IP RATING Dimension Weight	≥66 (440X195X100) mm 2.5 kg

# Street Vendor Light

7 W Watt 10W 12V DC 12V DC Input Range **Output Lumens** >100 lm/W>100 lm/W>70 >70 **Driver Efficiency** >88% >88% IP Rating >= 65 >= 65

Dimension (250X100X115) mm (250X100X115) mm

Operating Hours 4 Hours 5 Hours

Stand height Adjustable from 75-95 cm





Subject to change without notification.

For more info visit our website.



# **O** AC LED Drivers

These drivers having rated power ranging from 18W to 200W come with wide voltage and current range allowing customized operating configuration and intelligent control options for OEMs. Its compact size and excellent thermal management help OEMs reduce size of their end product, without compromising quality, resulting in significant cost savings. They are typically used in outdoor and industrial applications to meet the required performance, with uncompromising safety and sustainability.







Driver		18W			30W		45	5W
Model Name	NES-DAC-18-1836	NES-DAC-18-4060	NES-DAC-18-6080	NES-DAC-30-1730	NES-DAC-30-2853	NES-DAC-30-5080	NES-DAC-45-3656	NES-DAC-45-6080
Voltage Range	18-36V	40-60V	60-80V	17-30V	28-53V	50-80V	36-56V	60-80V
Current	600-800 mA	300-500 mA	200-350 mA	500-1000 mA	600-1000 mA	180-400 mA	600-800 mA	400-600 mA
Input Power	12-24W	12-24W	12-24W	12-35W	12-35W	12-35W	35-48W	35-48W
Dimension	70x45x25 mm	80x45x30 mm	80x45x30 mm					
PF	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95
Efficiency	≥85%	≥85%	≥85%	≥85%	≥85%	≥85%	≥85%	≥85%
THD	≤10	≤10	≤10	≤10	≤10	≤10	≤10	≤10

Driver		60W	
Model Name	NES-DAC-60-2742	NES-DAC-60-3656	NES-DAC-60-6080
Voltage Range	27-42V	36-56V	60-80V
Current	1200-1400 mA	900-1400 mA	600-800 mA
Input Power	45-65W	45-65W	45-65W
Dimension	100x65x30 mm	100x65x30 mm	100x65x30 mm
Dimming mode	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V
PF	≥0.95	≥0.95	≥0.95
Efficiency	≥87%	≥87%	≥87%
THD	≤10	≤10	≤10
Operating Frequency	50/60 Hz	50/60 Hz	50/60 Hz







Driver	8	80W		120W	
Model Name	NES-DAC-75-3656	NES-DAC-75-6080	NES-DAC-120-3656	NES-DAC-120-5075	NES-DAC-120-75105
Voltage Range	36-56V	60-80V	36-56V	50-75V	75-105V
Current	1000-1500 mA	600-1000 mA	1600-2100 mA	1200-1500 mA	600-950 mA
Input Power	65-80W	65-80W	80-120W	80-120W	80-120W
Dimension	100x65x40 mm	100x65x40 mm	100x65x40 mm	100x65x40 mm	100x65x40 mm
Dimming mode	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V
PF	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95
Efficiency	≥87%	≥87%	≥87%	≥87%	≥87%
THD	≤10	≤10	≤10	≤10	≤10
Operating Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
					· ·





Driver	200W	
Model Name	NES-DAC-200-4660	
Voltage Range	46-60V	
Current	2800-3300 mA	
Input Power	150-200W	
Potting	AVAILABLE	
Dimension	200x65x30 mm	
Dimming mode	AVAILABLE 0-10V	Application:
PF	≥0.95	LED Street lighting, industrial lighting
Efficiency	≥87%	Stadium lighting, Ware house lightin
THD	≤10	Indoor Lighting
Operating Frequency	50/60 Hz	

## Feature:

- Short circuit, LED Open voltage, Over voltage, Over temperature protection
- Available in Plastic, MS or Aluminum Extrusion casing
- Potted drivers available in IP66
- Withstand surge upto 6kV
- Suitable for dry and wet locations
- Extremely compact dimensions for flexible usage
- Compliance with safety standard IS 15885 Part 2 sec 13
- Compliance with EMC standards IEC 61547

# Dimmable Drive

Smart and IOT are the name of the game these days. Nessa offers a wide range of fully programmable drivers ranging from 80W to 120W with universal voltage and current range. These programmable LED drivers come with PWM and analog-based smart dimming features.



Driver	80	W		120W	
Model Name	NES-DAC-75-3656	NES-DAC-75-6080	NES-DAC-120-3656	NES-DAC-120-5075	NES-DAC-120-75105
Voltage Range	36-56V	60-80V	36-56V	50-75V	75-105V
Current	1000-1500 mA	600-1000 mA	1600-2100 mA	1200-1500 mA	600-950 mA
Dimension	100x65x40 mm	100x65x40 mm	100x65x40 mm	100x65x40 mm	100x65x40 mm
Dimming mode	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V	AVAILABLE 0-10V
PF	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95
Efficiency	≥87%	≥87%	≥87%	≥87%	≥87%
THD	≤10	≤10	≤10	≤10	≤10
Operating Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz



## Application:

AC smart lighting applications

## Egaturo:

- Inbuilt dimming circuit on PWM (0-10v dc) signal for smart light (>=60w)
- Short circuit, LED Open voltage, Over voltage, Over temperature protectionFully potted IP66 driver design
- Compatible with various controller brands
- Potted driver available in Extrusion casing with Ip66
- Withstand surge upto 6kV
- Compliance with safety standard IS 15885 Part 2 sec 13
- Compliance with EMC standards IEC 61547



# O DC Driver

DC drivers are constant current led drivers specially developed for use in solar applications. These drivers have in-built intelligence and programmable dimming control for power saving. They range from 15W to 30W, with 12V / 24V output voltage. Nessa DC drivers are compatible with charge controllers of all leading brands for OEMs



Driver	15W	25W	30W
Model Name	NES-DDC-15-1836	NES-DDC-25-2736	NES-DDC-30-1836
Voltage Range	18-36V	27-36V	18-36V
Current	350 to 700mA	350 to 700mA	700 to 1400mA
Input Power	15W Maximum	25W Maximum	30W Maximum
Input voltage	12V DC	24V DC	12V DC
Dimension	45x30x10 mm	45x30x10 mm	55x50x20 mm

## Application:

Suitable for solar street light, solar flood light, solar high-mast lighting applications

# Feature:

- Over voltage, Open Voltage, Short circuit protection
- Suitable for dry and wet locations
- Available in plastic or MS casing Compact design for easy mounting

# Solar Charge Controller Combo

Solar charge controller combo is led driver with in-built charge controller specially developed for low-cost and highly efficient solar street light applications. The combo card has in-built intelligent and programmable dimming control for power saving. Nessa combo cards are an effective, reliable, and low-cost solution for small-size solar street lighting applications. With special built-in AI algorithms, these combo cards are guaranteed to increase overall operating hours and the life of the battery by an extra 50%.

# PWM Based

Driver	15W	18W	25W	30W
Model Name	NES-SCON-15-1836P	NES-SCON-18-1836P	NES-SCON-25-1836P	NES-SCON-30-1836P
Voltage Range	18-36V	18-36V	18-36V	18-36V
Current	350 to 700mA	350 to 700mA	500 to 1000mA	500 to1400mA
Input Power	6-15W	15-18W	18-25W	25-30W
Input voltage	12V DC	12V DC	12V DC	12V DC
Solar Panel	60W	75W	100W	120W
Dimension	70x35x30 mm	70x35x30 mm	80x50x30 mm	80x50x30 mm
Potting	AS PER REQUIREMENT	AS PER REQUIREMENT	AS PER REQUIREMENT	AS PER REQUIREMENT
Dimming	Available	Available	Available	Available

## MPPT

OIVII I I	
Driver	15W
Model Name	NES-SCON-15-1836M
Voltage Range	18-36V
Current	350 to700mA
Input Power	6-15W
Input voltage	12V DC
Solar Panel	75W
Dimension	85x65x35 mm
Potting	AS PER REQUIREMEN
Dimming Mode	Available







## Application:

Solar street light, solar flood light, solar high-mast lighting, and other outdoor lighting applications

## Feature<sup>5</sup>

- Intelligent monsoon dimming Battery level indicator More efficient charging Compatible with any branded DC driver
- 🦚 Reverse Battery Protection, Reverse Panel Protection, Output short circuit Protection, Battery Over Voltage Protection, Low Battery Protection.



# Solar Charge Controller

Nessa solar charge controllers have been specially developed for solar-based battery-operated applications. They are available in the current range from 10 Amp to 20 Amp with 12V / 24V input Voltage. These PWM& MPPT based solar charge controllers can be used with various types of batteries such as Li-ion, LiFePO4, Lead-acid, VRLA, SMF, and Gel batteries of any brand.

## PWM Based

Model Name	NES-SCC-10	NES-SCC-15
Voltage Range	18-36V	18-36V
Input Voltage	12V/24V & 10A	12V/24V & 15A
Solar Panel	12V 150W & 24V 300W	12V 200W & 24V 400W
Potting	AS PER REQUIREMENT	AS PER REQUIREMENT
Dimming Mode	Available	Available
Dimension	75x70x30 mm	80x75x30 mm



MPPT
Input Voltage 12V 20A
Solar Panel 12V 300W
Potting AS PER REQUIREMENT
Dimming Mode Available

Dimension



## Application:

Solar street light, solar flood light, solar high-mast lighting, and other outdoor lighting applications

130x70x50 mm

## Feature:

- Intelligent monsoon dimming A Battery level indicator More efficient charging Compatible with any branded DC driver
- Reverse Battery Protection, Reverse Panel Protection, Output short circuit Protection, Battery Over Voltage Protection, Low Battery Protection.



Model Name	NES-SP-10	NES-SP-20
Voltage Range	10kV	20kV
Input Voltage	230V AC	230V AC
Potting	Available	Available
Safety Standards	IEC 61643-11	IEC 61643-11

# Surge Protection Device

External 10kV & 20kV SPD available to with stand any smaller time current surge up to 20kA.

## Feature:

- Compliance With lec 61643-11 & lec 61000-4-5
- Full Protection between Phase and Earth, Phase and Neutral, Neutral and Earth >= Ip65

# Motion Sensor

A single sensor can be configured for 7 different applications

## Feature:

- Only dimming after some time Only dusk to down
- Dusk to down with dimming after some time
- Only motion based On-off Motion based dimming
- Dusk to down with motion based On-off after some time
- Dusk to down with motion based dimming after some time

Model Name	NES-MOS
Dimming Mode	Available
Pmax	200W
Surge Protection	upto 4kV
Connection type	series





# AC Dusk to Down

Model Name	NES-DAC-D2D
Input Voltage	230V AC
Potting	AS PER REQUIREMENT
Dimming Mode	Available

# Production and Testing Facilities\_\_\_\_\_





**Nessa Premises** 

QC Department









Production Burn Testing Integrating Sphere Humidity Chamber

# Service Centres

With a nationwide service centre coverage, Nessa has established a unique position in LED lighting industry. At Nessa Service centres, we provide service support for not just products made by NESSA but also any product supplier.

Our service personnel are well trained to understand all type of LED lighting issues and fix them in a quick and economical way.

- Nationwide Service Network
- Repair Any Type Of LED Lights
- Well Trained Service Engineers
- 72 Hours Turnaround Time

# Voice of Customers \_\_\_\_\_

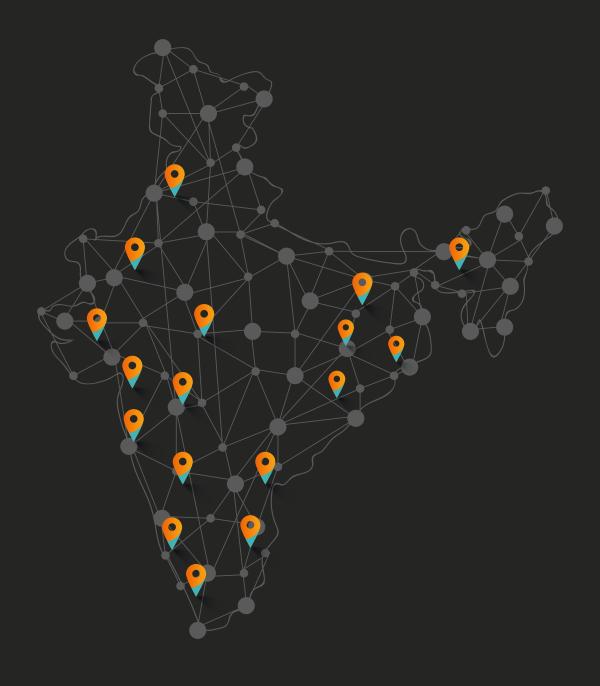














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