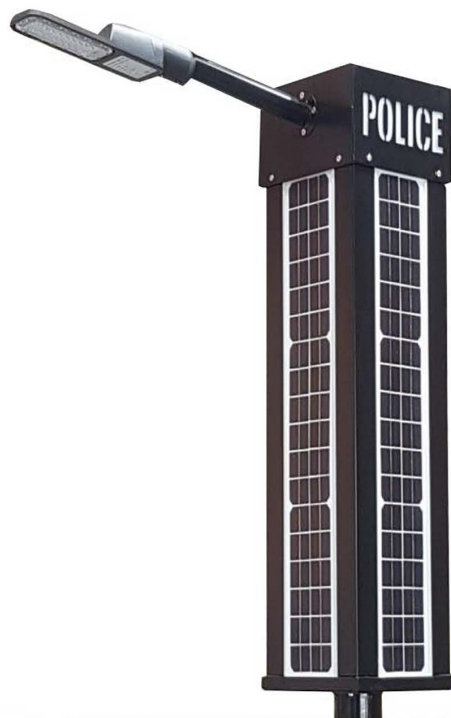

NEZIO

Vertical integrated

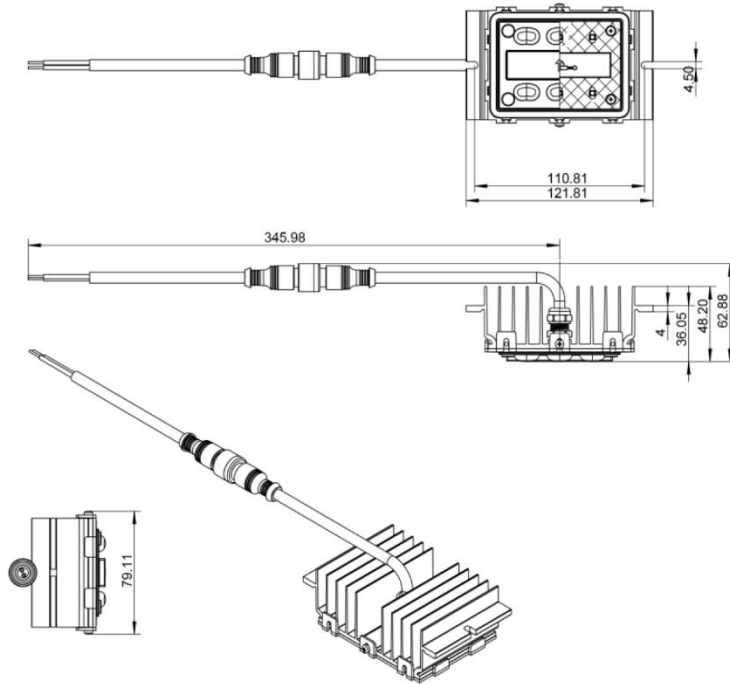
Solar LED Street lighting
12, 15 and 20 Watt models



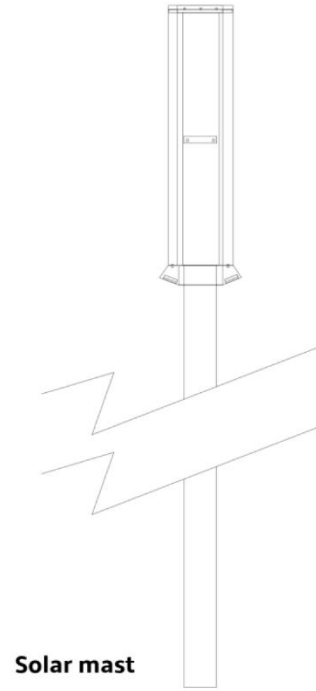
LED Solar Masts are the perfect solution for street lighting, offices and estates, parking lots, public parks and pathways, service stations, and general areas where lighting is required.

HARNESSING THE POWER OF THE SUN

TECHNICAL ILLUSTRATIONS



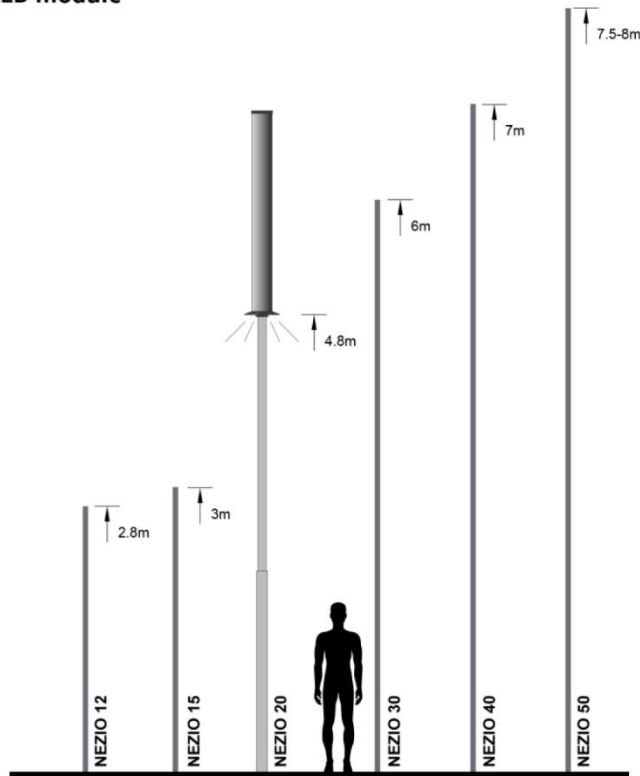
LED module



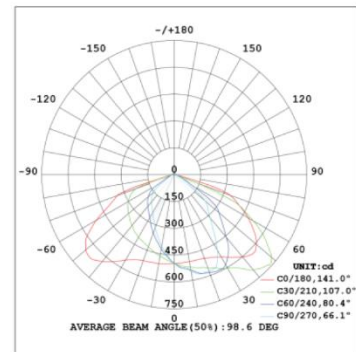
Solar mast



LED modules



Height comparison between models



Optical test data

TECHNICAL DATA SHEET

LED Modules

The LED modules on our **Nezio Solar Masts** are manufactured with Seoul semiconductor chips, are compact and elegant in design as well as vibration and moisture proof. **Nezio** LED modules are simple to replace and manufactured with a four year warranty.

LED lighting technology offers many advantages:

- Low power consumption
- Unaffected by repeated stops and starts
- Resistance to mechanical stress, moisture and vibration
- Lack of ultraviolet radiation emission and infrared
- Gives light closest to natural light and does not distort colours
- Long life time
- Very low premature failure rate

Operating frequency (Hz): 50Hz

Life span: ≥50.000h

Material: Aluminum Alloy

Working conditions (temperature / humidity): -25°C ~ 50°C, 10% ~ 90% RH

Storage conditions (temperature / humidity): -40°C ~ 85°C, 0% ~ 95% RH

Dimensions: 122*80*45mm

Weight: 0.27kg

Degree of protection (IP): IP 67

NEZIO 12

NEZIO 15

NEZIO 20

LED Modules - IEC 62031

	NEZIO 12	NEZIO 15	NEZIO 20
Power (W)	11.97	14.98	19.22
Voltage (V)	18.41	18.72	19.22
Current (mA)	650	800	1000
Colour temperature (k)	5626	5687	5755
CRI (Ra)	75.9	76.1	76.1
Luminous flux (lm)	1475	1714.4	2025.9
Luminous efficacy (lm/w)	123.19	114.44	105.38

Solar Panels - IEC 61215

	NEZIO 12	NEZIO 15	NEZIO 20
Model	4 x 12.5w panels (50w)	4 x 12.5w panels (50w)	4x25w panels (100w)
Size	52*39	62.5*41.6	62.5*62.5
PV cells	Mono Crystalline	Mono Crystalline	Mono Crystalline
Number cells (pcs)	36(2*18)	36(2*18)	36(2*18)
Max power (W)	12.5	15	25
Max working voltage (V)	18	18	18
Max working current (A)	0.695	0.83	1.39
Open circuit voltage (V)	22	22	22
Short circuit current (A)	0.78	0.87	1.46
Size of module (mm)	137*790*20	137*1010*25	137*1490*25
N.W of weight (kg)	1.2	1.5	2.2
Cells of efficiency	19	18.60%	18.60%
Warranty (years)	15	15	15

Batteries - IEC 62033

	NEZIO 12	NEZIO 15	NEZIO 20
Amps	22	30	40
Nominal voltage	11.1v	11.1v	11.1v
Discharge current (max)	10amp	10amp	10amp
Discharge cut off voltage	9v±0.1	9v±0.1	9v±0.1
Charge voltage	12.6v±0.1	12.6v±0.1	12.6v±0.1
Operation temp. range	0°C ~ +55°C	0°C ~ +55°C	0°C ~ +55°C
Weight (kg)	1.6	2.1	2.8
Warranty (years)	2	2	2

Wireless Solar Controller (Lithium) - IEC62321-4 / IEC 62321-5

	NEZIO 12	NEZIO 15	NEZIO 20
Battery voltage	12-48	12-48	12-48
Max.solar input power	120w	120w	120w
Max.solar input voltage	<55v	<55v	<55v
Max.Voc of solar panel	18V	18V	18V
Max.charging current	10amp	10amp	10amp
Warranty (years)	3	3	3

Batteries

Lights have been designed to burn at 100% capacity for first 5 hours, then dim down to 70% for 7 hours to complete a 12 hour operating cycle.

Models can also be designed and supplied to burn all night on 100% capacity and all systems are catered with a 2 day battery reserve factor.

Our Lithium batteries have over 1200 cycles at 90% Depth of Discharge and our models are designed to only discharge down to a level of 70% DOD increasing the batteries' cycles from 3 to 5 years at 70% DOD.

Wireless Solar Controller

Multi-crest tech, adapts to the solar panel which is under shadow or partly damaged.

4 levels dimming design (including morning lighting).

IR remote control: for parameter setting, parameter reading and historical data checking.

Auto identify day/night.

Very low dormancy loss: 0.06W.

Protections: IP68, over charge/ over discharge protection, reverse connection protection, reverse charging protection, over load/over current protection, short circuit/ open circuit protection, over temperature protection, TVS lighting protection.

Framework

Choice of framework colours:

Black, anthracite grey, white, silver - other colours optional with MOQ 10 units. Three year warranty on framework.



**South African Design
Patent Numbers**

A2015 - 01322, F2015 - 01325

Manufactured by

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