

## PIENAAR ENERGY (PTY) LTD

# Is the blue light powered by solar energy



**Efficient  
Higher Revenue**

- Max. Efficiency 97.5%
- Max. PV Input Voltage 600V
- 150% Peak Output Power
- 2 MPP Trackers, 150% DC Input Oversizing
- Max. PV Input Current 16A, Compatible with High Power Modules



**Intelligent  
Simple O&M**

- IP66 Protection Degree: support outdoor installation
- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- DC & AC Type II SPD: prevent lightning damage
- Battery Reverse Connection Protection



**Flexible  
Abundant Configuration**

- Plug & Play, EPS Switching Under 10ms
- Compatible with Lead-acid and Lithium Batteries
- Max. 6 units Inverters Parallel
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

## Overview

---

Solar radiation generates blue light through a natural interplay of energy and atmosphere. The sun's core emits electromagnetic waves spanning the visible spectrum, with blue light wavelengths falling between 400 and 495 nanometers. As its name describes, Solar Blue Light is electromagnetic radiation that is both “high-energy”, (and thereby has potential to cause harmful changes in living tissues), and is visible. Researchers like the American Academy of Ophthalmology confirm that blue light carries more energy than other colors in. Too much blue light, especially from digital sources, may lead to eye strain and computer vision syndrome We've all been exposed to blue light at one point or another. We get most of it from the sun. Firstly, the hue aids in the effective dispersal of sunlight inside the tube.

## Is the blue light powered by solar energy

---



### Natural Sources of Blue Light: The Sun and Surprising Origins You ...

Solar radiation generates blue light through a natural interplay of energy and atmosphere. The sun's core emits electromagnetic waves spanning the visible spectrum, with blue light wavelengths falling ...

[Get Price](#)

### Why are solar tubes blue? , NenPower

Blue is part of the visible spectrum, which can maximize the capture of light while minimizing heat absorption. This characteristic allows for a more efficient transfer of natural light into ...



[Get Price](#)

### Applications



### Demystifying Blue Light: What is it and Where Does it Come From

Blue light is a color in the "visible light spectrum" that human eyes can see. More specifically, blue light has a very short wavelength, which means it produces a higher amount of energy.

[Get Price](#)

## Blue light , Definition, Optics, & Facts , Britannica

As blue light is the closest visible light to ultraviolet light, its effects on the retina are more potent than lower-energy wavelengths. In nature the most obvious source of blue light is sunlight. Thus, ...

[Get Price](#)



## What is blue light?

The lamps used to treat Seasonal Affective Disorder (SAD) concentrate blue light at its highest-energy wavelengths to mimic sunlight. One study at the Mood Disorders Clinic at the ...

[Get Price](#)

## Daylight , The Definitive Guide to Blue Light , Daylight Blog

Because of their restorative properties, longer wavelength (red/infrared) light offsets and balances the high energy (blue, violet, UV) wavelengths in sunlight.

[Get Price](#)



## Solar Powered Outdoor Blue Lights

This article explores the characteristics, benefits, considerations, and applications of solar powered outdoor

blue lights, providing a comprehensive overview of this burgeoning technology.

[Get Price](#)



---

## SOLAR BLUE LIGHT

Although high energy, (blue and violet) visible light has less energy than UV radiation, it is absorbed by the retina and therefore has the potential to damage retinal cells.

[Get Price](#)



---

## Facts, Statistics & Myths About 'Blue Light' - NVISION

Sunlight is the main source of blue light, but as more of us use laptops, flat-screen televisions, tablets, and smartphones, we increase our exposure to blue light that mimics daylight.

[Get Price](#)

---

## What Is Blue Light and Is It Bad for Your Eyes?

In fact, blue light is so strong that it's almost as powerful as the ultraviolet (UV) rays we get directly from the sun.

[Get Price](#)



**1075KWHH ESS**

---

## Contact Us

For catalog requests, pricing, or partnerships, please visit:  
<https://pienaarshof.co.za>

