TRANSRAIL

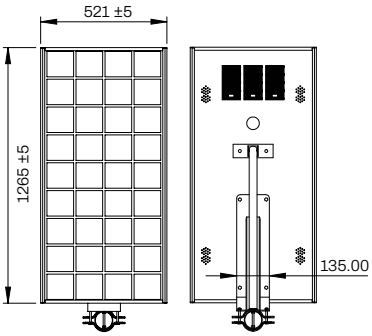
# TRANSFORMING STREETS

## ALL-IN-ONE
SOLAR STREET LIGHT

Introducing the Transrail All-in-One solar street light, a revolutionary solution designed to redefine street lighting. Compact, aesthetically pleasing, and equipped with smart PIR sensors, it offers high brightness and efficiency. With its integrated design combining solar panel, LED light, and inbuilt battery, it represents the future of sustainable urban illumination, approved by BIS & MNRE for added reliability.

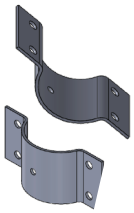
# ALL-IN-ONE
## SOLAR STREET LIGHT

### Product Diagram




### Pole Mounting Pipe

### Solar Light Pole Support Bracket



| System Wattage(Input) | 9 | 12 | 15 | 20 | 35 | 40 | 45 | 50 | 60 | 70 | 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Input Voltage | 12.8V (nom) | | | | | | | | 25.6V (nom) | | |
| Efficiency | ≥ 90% | | | | | | | | | | |
| LED | 3030 | | | | | | | | | | |
| CRI | > 70 | | | | | | | | | | |
| CCT | 5500K - 6500K | | | | | | | | | | |
| Luminous Efficacy | Minimum 140 Lm/W ± 5% | | | | | | | | | | |
| Total Lumen | Minimum 5600 Lm ± 5% | | | | | | | | | | |
| LED LifeSpan | 50000 hrs | | | | | | | | | | |
| Distribution Pattern | Lens type II | | | | | | | | | | |
| Dimming | Light moves to Dimming within 45 second if no movable object observed and light moves to full brightness when any object comes in 8-10 mtr range of PIR sensor. | | | | | | | | | | |
| Dimming Profile | Dimmable | | | | | | | | | | |
| **Charge Controller Specification** | | | | | | | | | | | |
| Charger Type | MPPT (in-built inside luminaire) | | | | | | | | | | |
| Charging Algorithm | 2 Stage charging(CC-CV) | | | | | | | | | | |
| **Protections, Indicators & General Specifications** | | | | | | | | | | | |
| Open Circuit Protection | Provided | | | | | | | | | | |
| Short Circuit Protection | Provided | | | | | | | | | | |
| Reverse Polarity | Provided | | | | | | | | | | |
| Self consumption | < 30 mA | | | | | | | | | | |
| Operating Temperature & Humidity Range | 0 to 45°C/35 to 80%RH | | | | | | | | | | |
| IK for IP lens | IK08 | | | | | | | | | | |
| **Housing Specifications** | | | | | | | | | | | |
| Material Used | Aluminium Extrusion | | | | | | | | | | |
| **System Level Specifications (Recommended Specification for use with luminaire)** | | | | | | | | | | | |
| **Battery Specifications** | | | | | | | | | | | |
| Battery Type | LiFePo4 | | | | | | | | | | |
| Battery Voltage | 12.8V (nom) | | | | | | | | 25.6V (nom) | | |
| Battery Capacity(AH) | Battery Capacity designed for 24hrs working (Battery life cycle 2000 cycles @ 25°C and 80% DOD) | | | | | | | | | | |
| Backup/Autonomy | 12Hrs + 12 Hrs, Smart Diming when no Movement near AIO | | | | | | | | | | |
| **Panel Specifications** | | | | | | | | | | | |
| Voltage at Pm( Vm) | 18V | | | | | | | | | | |
| Panel Spec Supported | up to 150W ± 5% (Monocrystalline) | | | | | | | | | | |

Note: Above autonomy/backup when battery is fully charged.

Transrail Lighting Ltd is one of the leading Indian engineering, procurement and construction companies with over four decades of experience in providing comprehensive solutions on a turnkey basis globally. Our business is divided into four verticals, namely (i) power transmission and distribution (including substations), (ii) civil construction, (iii) poles and lighting, and (iv) railways. With footprints in 58 Countries, we have large-scale manufacturing facilities in India for Galvanized Lattice Towers, Conductors and Galvanized Polygonal Poles in addition to a well-accredited R&D tower testing facility.

**TRANSRAIL LIGHTING LIMITED**

A Wing, 5th Floor, Fortune 2000, Block G, Bandra Kurla Complex, Bandra (East), Mumbai 400051, India. Phone: +91-22-6197 9600 | Fax: +91-22-6197 9666

Website: www.transrail.in | Email: enquiry@transraillighting.com | Customer Care: mktgpoles@transraillighting.com