LIGHTING THE MOMENTS WHERE PROGRESS BEGINS...





# POWER FOR PROGRESS

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Across India, progress doesn't wait for daylight. It moves through night shifts, monsoon storms, remote terrains, and the forgotten edges of our cities and fields.

That's why Trine builds mobile light towers designed to arrive where work begins—lighting highways, mines, farms, rescue zones, Oil and Gas refineries and sports events that keep India moving. Our towers don't just illuminate. They enable work. They enable safety. They enable progress itself.

- Y Advanced LED Floodlight Technology.
- **Robust, Weather-Resistant Construction.**
- Reliable Power System.

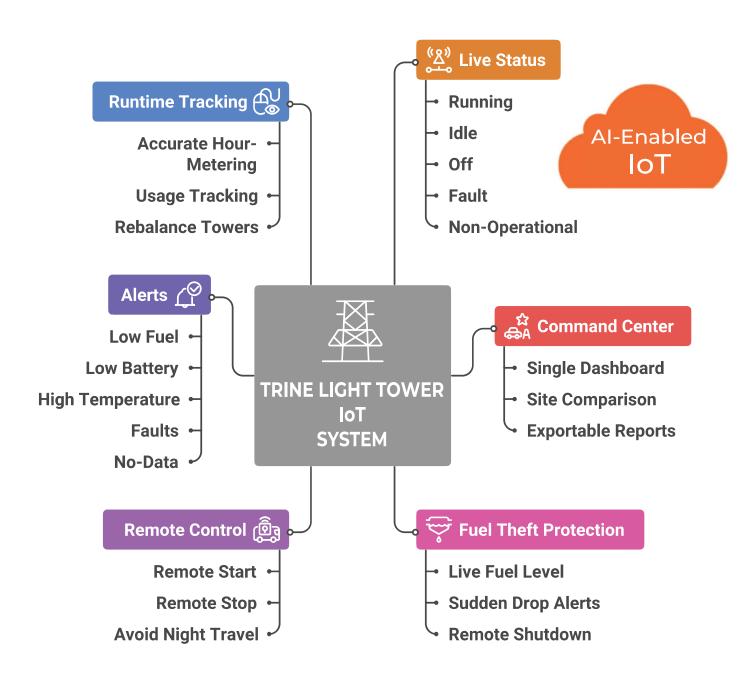
- ▼ Compact & Portable for Easy Transport.
- **Y** Low Fuel Consumption & CPCB IV+ complaint.
- Y Long Runtime on a Single Refuel.



### TRINE LIGHT TOWER IOT SYSTEM



- Trine Light Tower Management System is an IoT platform to monitor and control light towers remotely.
- It provides runtime tracking with accurate hour-metering, usage analytics, and tower rebalancing.
- Y Live status shows each tower's running, idle, off, fault, or non-operational condition in real time.
- The system offers alerts for low fuel, low battery, high temperature, faults, and connectivity loss, plus fuel-theft protection with level monitoring and sudden drop alerts.
- A central command center enables remote start/stop, reduces night travel, supports site comparison, and generates exportable reports.

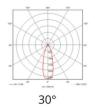


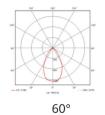
# **NEW INNOVATIVE LED LAMPS**

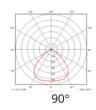


- Y Offers 3x area coverage compared to traditional high mast poles, delivering better light spread over larger spaces.
- → High efficiency lighting reduces diesel consumption and lowers operating costs.
- Special optics for wider area coverage.
- Y Lower diesel consumption per hour by @30% for same illumination and area coverage.
- Y Long product life of 100,000 hours (double than regular LED).
- IP66 dust proof and water proof, even suitable for extreme conditions of heavy rain, desert sand, snowfall, etc.









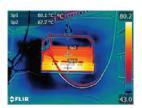


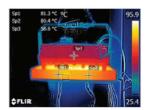








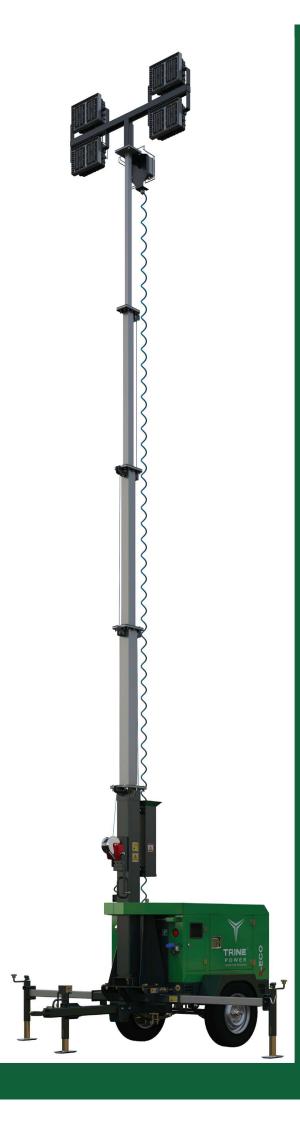




## **DEEP SEA CONTROLLER**

- ▼ Intelligent Automatic Operation.
- Y Advanced Engine & Generator Protection.
- Y Remote Monitoring & Control Ready.
- Y Rugged, Field-Proven Reliability.





# TECHNICAL HIGHLIGHTS

| -NI | C | M | Е |  |
|-----|---|---|---|--|

| Engine Model                   | Rehlko (Kohler / Lombardini) |
|--------------------------------|------------------------------|
| Engine Speed (rpm)             | 3000                         |
| Engine Rated Output (PRP) (kW) | 6.1                          |
| Coolant                        | Air Cooled                   |
| Number of Cylinders            | 1                            |
| Emission Norms                 | CPCB IV <sup>+</sup>         |

#### PERFOMANCE DATA

| Rated Frequency (Hz)                     | 50              |
|------------------------------------------|-----------------|
| Rated Voltage (VAC)                      | 230             |
| Rated Power (PRP)                        | 5 kw (6.25 kVA) |
| Operating temp. (°C)                     | 0 / 50          |
| Sound power level (LwA) (dB) A           | 86              |
| Sound pressure level (LpA) at 7m, (dB) A | <70 at 1 mtr    |

#### Energy Consumption

| Fuel Type                      | Diesel   |
|--------------------------------|----------|
| Fuel tank capacity (I)         | 60       |
| Fuel consumption (Lights only) | 0.80 LPH |
| Fuel Consumption (100% Load)   | 1.3 LPH  |
| Runtime (hrs)                  | 70       |

#### Alternator

| Alternator make                   | NSM / Meccalte (Italy) |
|-----------------------------------|------------------------|
| Alternator type                   | Brushless capacitor    |
| Alternator rated output (kVA)     | 5                      |
| Insulation / Enclosure protection | H / 23                 |

#### Parameter

| Light coverage (m²) | 5,000 (average 20 luxes) |
|---------------------|--------------------------|
| Lamps               | LED                      |
| Extra features      | IoT Enabled              |

#### Lights

| Floodlights | LED             |
|-------------|-----------------|
| Wattage (W) | 4 x 300         |
| Lumens (Im) | 1,80,000 Lumens |
| LED Life    | 100,000 hours   |

#### Power Output

| Auxiliary Power (kW) | 16 AMPS                         |
|----------------------|---------------------------------|
| Inlet Plug           | 6A, 230/240V, USB Charging Port |

#### Mast

| Mast type               | Vertical Manual (5 section) |
|-------------------------|-----------------------------|
| Mast rotation (degrees) | 355                         |
| Mast maximum height (m) | 8                           |
| Mast Sections           | 5                           |
| Mast Erection Time      | < 3 minutes                 |
| Mast Coating            | Hot Dip Galvanizing         |
| Max Wind Speed (km/h)   | 85                          |

#### Enclosure and Trailer

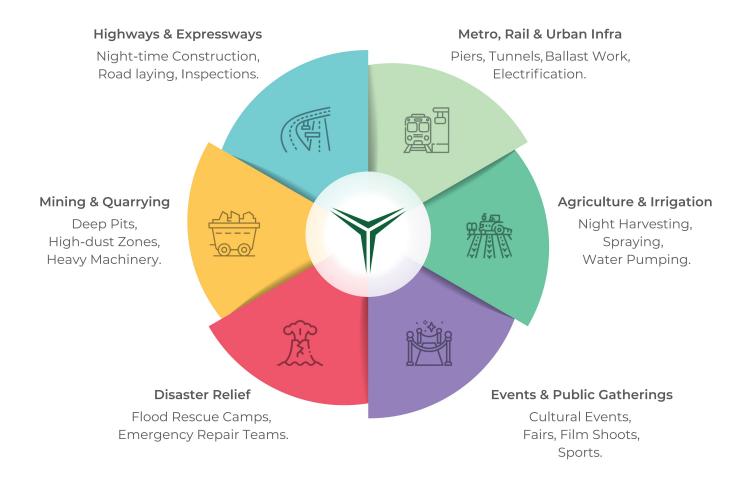
| Dimensions and Weight |                                           |
|-----------------------|-------------------------------------------|
| I Enclosure           | Tough Steel with High Corrosion Resistant |

| Transport dimensions Fix Towbar L $x W x H x (m)$ | 1.9 x 1.1 x 2.4 |
|---------------------------------------------------|-----------------|
| Opearting Dimensions (m)<br>L x W x H x (m)       | 2.8 x 2.8 x 8   |
| Weight (Dry / Wet, kg)                            | 600 / 670       |

#### lоТ

Remote Monitoring, Data Access, Remote Diagonsis, GEO Fencing, Remote ON/OFF

# WHERE TRINE POWERS PROGRESS



- **Highways and Expressways:** Night-time construction, road laying, and inspection needs.
- Metro, Rail and Urban Infrastructure: Piers, tunnels, ballast work, and electrification projects.
- **Agriculture and Irrigation :** Night harvesting, spraying, and water pumping operations.
- **Events and Public Gatherings :** Cultural events, fairs, film shoots, and sports.
- **Disaster Relief:** Flood rescue camps and emergency repair teams.
- Mining and Quarrying: Deep pits, high-dust zones, and heavy machinery work.



# **WHY TRINE?**



- TWO DECADES OF ENGINEERING EXPERTISE: Rugged, reliable mobile lighting solutions built to meet India's toughest demands.
- INDIAS MOST ADVANCED MOBILE LIGHTING TECHNOLOGY: IoT-enabled systems with hybrid power, long-life LEDs, and robust mast engineering.
- **BUILT TO ENDURE HARSH CONDITIONS:** Proven performance in monsoon rains, dust, and high-vibration worksites.
- FASTER DEPLOYMENT, WIDER COVERAGE: Rapid setup and high-intensity illumination for work that cannot pause or be delayed.
- **TRUSTED ACROSS INDUSTRIES:** Deployed on infrastructure, agriculture, mining, rescue, and event sites across India.

# GROW YOUR BUSINESS WITH OUR ENGINEERING EXPERISE



#### Manufactured by the Yash Group (Pune)

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