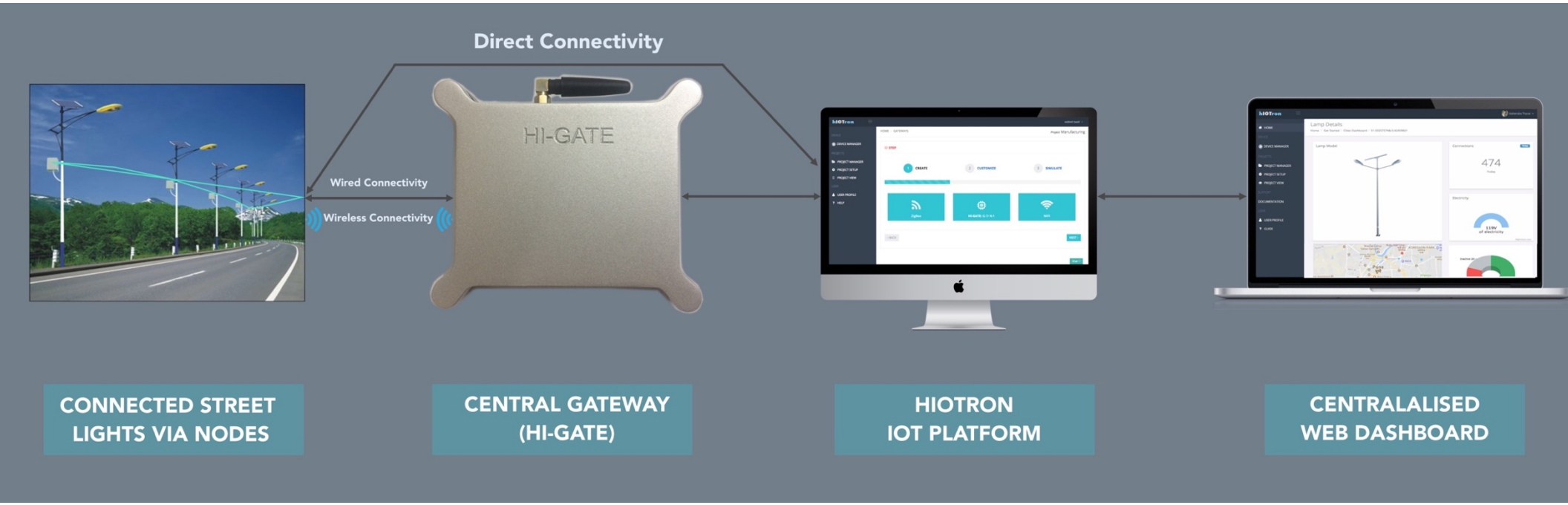
Smart Street Lights for smarter cities

hIOTron is a powerful yet extremely flexible Central Management IoT Platform for street lighting. A combination of software applications and different hardware technologies that will offer you full control over any kind of lighting network enabling activity scheduling, real time faults notification, remote meter reading, performance analysis, custom dimming scenarios creation, maintenance workflow management and much more, increasing efficiency and cutting down costs



hIOTron offer three Node – Gateway connectivity solutions such as Wired, Wireless & gateway as Node for street light remote control and status data transmission.

hIOTron is a great platform for Smart City and Internet of Things applications, providing a stable communication for all 3 types of connectivity solutions that require permanent attention from the operator/supervisor. All series of hardware complies with Industrial Standard CENELEC, ISO, IEC.

Solution Installation Options

1. Wired Solution– Wired solution provides half-duplex, "master-slave" communication between one central gateway (master) and a number of nodes (slaves). Every node has unique number, which allows the gateway to address each one of them individually. The gateway also creates a network of nodes connected to the same power line by continuously polling nodes for their status and sending commands to an individual node, group of nodes or to the entire network. In case the power line used by gateway control is too long or noisy, certain nodes may retransmit signal from the central gateway to distant nodes and back providing a stable communication across the entire network.

2. Wireless Solution – In a wireless solution each node communicates to the central gateway wirelessly using 800-950 MHz wireless interface allows mesh network of up to 25 nodes in a range of up to 5 km, maximum distance depends on terrain and density of buildings with central gateway. In order to increase the range of communication between nodes & gateways, other wireless hIOTron communication modules such as Zig-Bee or SUB-1 can be easily plugged inside the hardware units (Nodes & Gateway) right before installation & network settings can be updated through hIOTron web based IoT platform with few clicks.

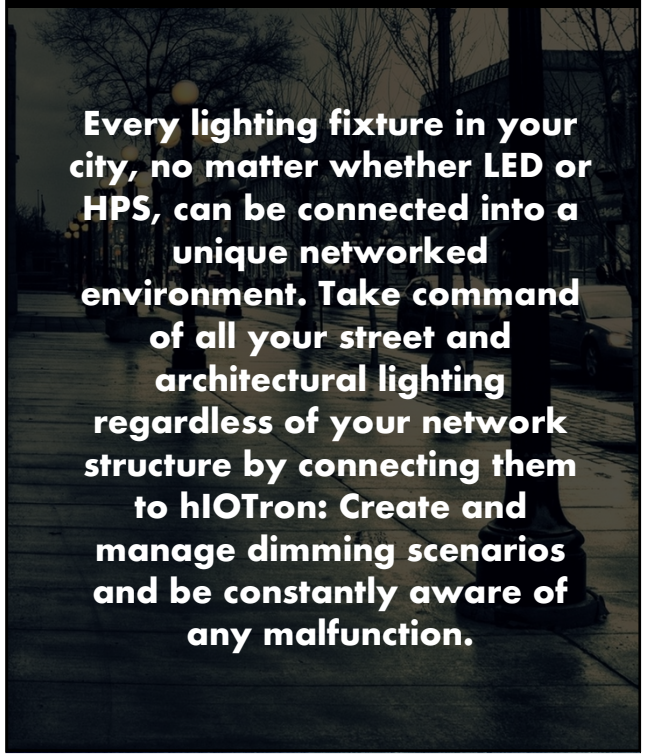
3. Gateway as node Solution – Use directly Gateway as a Node to remotely control & status data transmission of street lights in case of two nearest pole wired or wireless range limitation.

Solution Highlights

- ✓ Nodes & Gateway communicates in wired or wireless via LoRa, Zig-Bee, SUB-1 form.
- ✓ Gateway internet or Server/hIOTron platform communication options available for Wi-Fi/Ethernet/GSM (3G/4G/LTE) or any better combination as per requirement with priority based on availability feature.
- ✓ Mobile application, Web Dashboard and Centralized control room dashboard access for Control, Dimming, real time live monitoring, event logs, precise stats, pole device management, location tracking, maintenance workflow management and reporting tool in case of predicted or unpredicted event.
- ✓ Hardware (Gateway & Nodes) unit can be powered through powerlines directly or solar enabled rechargeable batteries. (Both options available)
- ✓ Hardware unit installation options available on the pole downside in a box (just to reduce maintenance cost), Inside the lamp housing or integrated with lamp driver circuitry as a single PCBs for OEM partners.

Solution USPs

Full Control of your Lighting Network



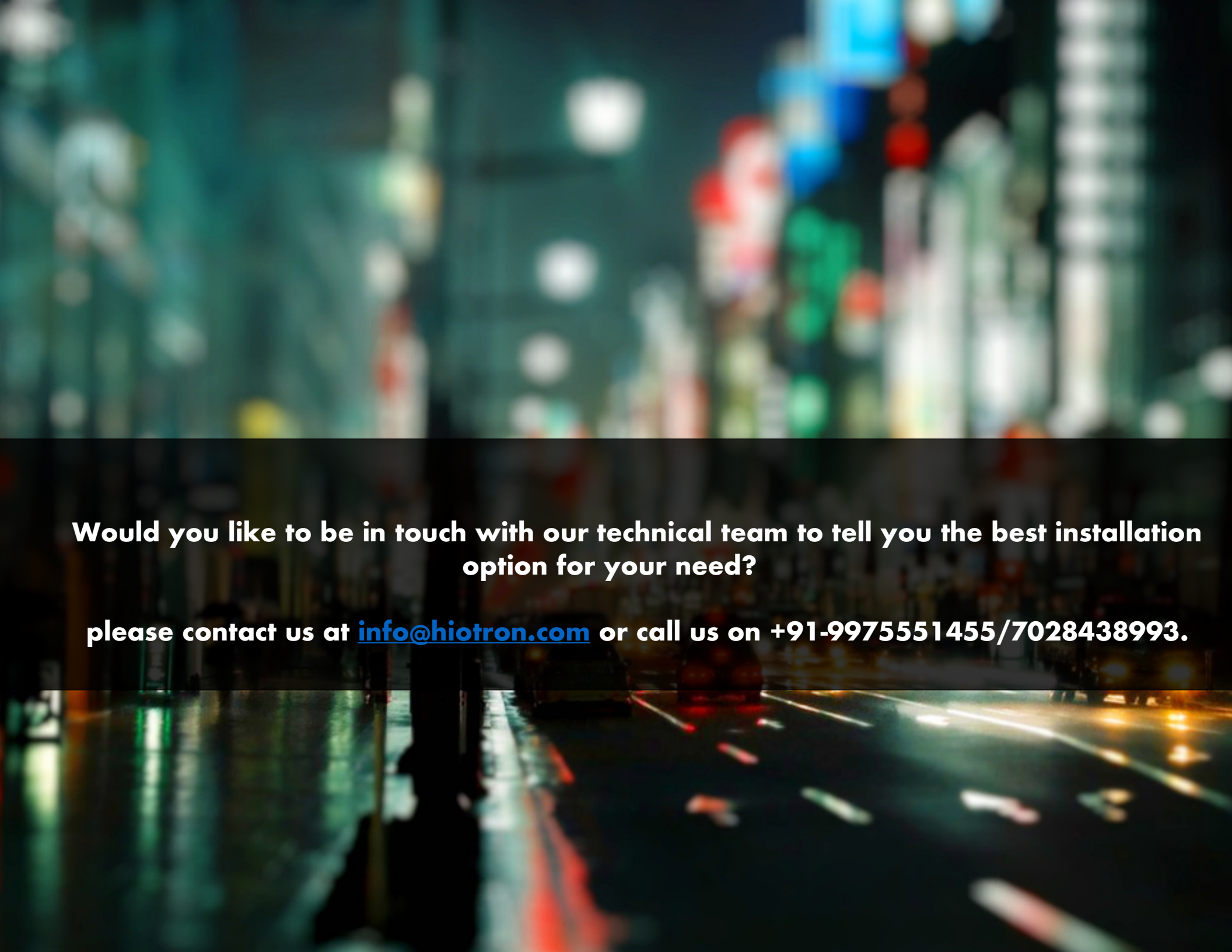
Every lighting fixture in your city, no matter whether LED or HPS, can be connected into a unique networked environment. Take command of all your street and architectural lighting regardless of your network structure by connecting them to hIOTron: Create and manage dimming scenarios and be constantly aware of any malfunction.

Save time & Cost with hIOTron smart lights

hIOTron street light solution is created to help municipalities to save on energy and maintenance costs. Save up to 80% of lighting-related costs simply by managing lighting levels and implementing smart profiling to deliver lighting when and where it is needed.

Visualized Smart Data & Control Lights

hIOTron offers rich data visualization tools as well as real-time, map-based view of live status of any lighting point. Flexible reporting and documentation of all operational process enable a more effective control and decision making.



Would you like to be in touch with our technical team to tell you the best installation option for your need?

please contact us at info@hiotron.com or call us on +91-9975551455/7028438993.