



Add-ons and Modules

A Modular Approach to Technological Integration

iLamp's modular design is its cornerstone, allowing developers to create custom hardware and software modules that seamlessly integrate with iLamp's power and data management systems, ensuring a quick, plug-and-play setup.

Modules are backwards compatible, and so can be built in at manufacture or added at any time in the future, future proofing each iLamp and allowing upsells at the time of sale and any future point.

As new hardware modules are in continuous development by iLamp and its partners each iLamp becomes a perpetual revenue generator, creating a never ending cycle of recurring revenue and sales fees.

Each of these add-on modules consumes power, data and rack space, for which the module is billed via Power as a Service. A module development kit is openly available to all third party developers.

From environmental sensors to advanced communication tools, the iLamp platform is not just about illumination; it's about revolutionising urban infrastructure and providing a robust, future proofed product that becomes the backbone of the smart cities of the future.

Add-ons and Modules



Road Safety

iLamp positively impacts road safety by providing optimal lighting conditions on roads and highways. Its adaptive lighting capabilities can adjust brightness according to traffic conditions, enhancing safety during peak hours and adverse weather conditions. Camera and communications modules support apps to monitor traffic, speed, noise pollution, detect potential hazards, and improve response times to accidents, further improving road safety.



Pedestrian Safety

iLamp improves pedestrian safety by providing enhanced streetlighting in areas such as sidewalks, crosswalks, and public transportation stops. Modular cameras can be used to monitor pedestrian movement and help identify crimes and hazards, ensuring a safer environment for walking and other outdoor activities.



Public Protection

Smoke, fire, flood, gas leak and gunshot detection provide critical early response to serious safety issues, helping data driven early responses, helping to prevent or reduce harm caused.



Weather Monitoring Module

Weather sensors can detect changing weather conditions, such as fog, rain, or snow, and adjust the intensity and distribution of light accordingly. This adaptability enhances visibility for drivers and pedestrians in adverse weather conditions, further improving public safety.



Environmental Sensors

Air quality monitoring can help track air quality, pollen and pollution levels in real time for proactive data driven responses that limit exposure and maintain a healthy environment. By monitoring and addressing air quality concerns, iLamp contributes to improved broader public health and well being.



Enhanced Street Lighting

Enhanced Street Lighting is proven to reduce crime, enhance feelings of safety, and increase use of public spaces after dark.



Communications

Communication modules can both expand telecoms coverage and facilitate the transmission of critical information to the relevant authorities and emergency services in case of accidents or security incidents. This real-time communication can help improve response times and overall public safety.



Light Pollution Reduction

The adaptive lighting capabilities of iLamp can minimize light pollution by adjusting brightness levels according to the time of day and surrounding conditions. This can contribute to a better night-time environment, reducing the impact of artificial light on wildlife and human health.



Integration with Existing Infrastructure

iLamp technology can integrate with existing sensors and infrastructure, allowing for enhanced data collection and analysis. By connecting iLamp with sensors a modules facilitating parking, traffic management, telecommunications structural, UV and noise monitoring, fire, leak and flood detection, grid management and many more.