# LUMIFI FEATURE OVERVIEW

Lighting Control & Management Software Solutions

October 2017

LumiFi provides software-based lighting control solutions for the built environment with easy-to-use award-winning user interfaces and a series of innovative features. Our controls are designed with the end-user or designer in mind. LumiFi believes interoperability and an open platform is the key to a successful project. We bridge various 3rd party lighting manufacturers into one seamless experience and platform. Our user-friendly software platform integrates with 3rd party lighting hardware and offers additional functionality and user interfaces. LumiFi is a complete ecosystem that allows property operators to wirelessly configure, control, manage, and optimize their lighting environments. Its ecosystem manages the complexities of wireless lighting control so that you can simply optimize your environment and user experience with advanced technology.

Product System Overview

"LumiFi PROFESSIONAL", our Hospitality & Commercial Platform Solution
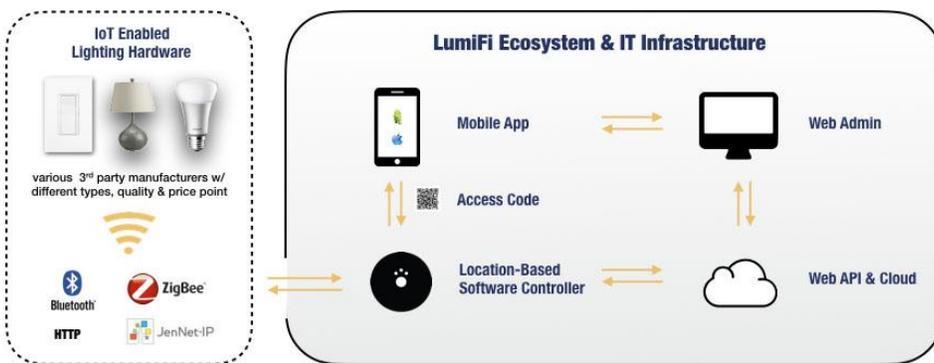
"LumiFi PRO" includes:

- Mobile Apps (iOS, Android)
- Web-Management Platform
- Onsite Controller
- Cloud Hosting of Access & Spatial Profiles

* Supports Philips Hue, TCP Connected, Xicato XIM, Ketra and Crestron with more hardware integrations in the works.

"LumiFi LITE" for Small Business Applications
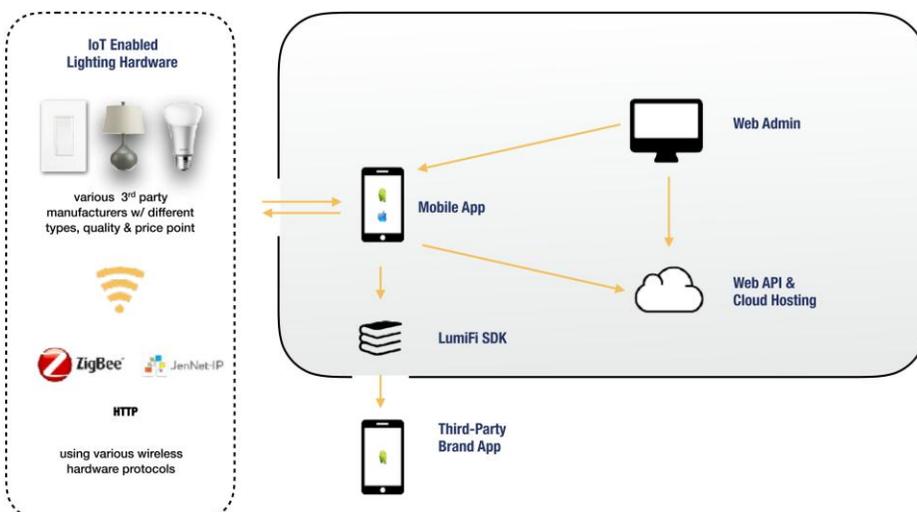
"LumiFi Lite" includes:

- Mobile Apps (iOS, Android)
- Cloud Hosting of Profiles
- Web-based Project Setup Tools

* Primarily Philips Hue, TCP Connected and Crestron. Based on client requirement we can add additional hardware.

LUMIFI SPECIFICATION GUIDE

INTEGRATED LIGHTING HARDWARE

LumiFi works with established lighting manufactures that incorporate wireless technologies across multiple protocols (including Zigbee, HTTP and Bluetooth) and gateways. Third party hardware recommendation is dependent on project and client specifications.

LUMIFI INTEGRATED AND SUPPORTED HARDWARE MANUFACTURERS & PARTNERS

SUPPORTED LIGHT FIXTURE TYPES & COLOR SPACE

Our light management tools allow you to match fixture types with color space across multiple lights based on the minimal denominator and easily and intuitively edit them with graphical widgets or by entering numeric values.

Dimming [brightness in %]	Tunable White [Color temperature in Kelvin]	Color changing (RGB) [Color as RGB value]	Color changing (CIE 1931) [Color as x,y chromaticity; hue]

SUPPORTED COLOR SPACE BY MANUFACTURER

	Dimming	Tunable White	Color changing (RGB)	Color changing (CIE 1931)
Philips HUE	◉	◉	◉	
TCP Connected	◉			
Ketra	◉	◉		◉
Xicato XIM - XIG	◉			

SUPPORTED LAMP & FIXTURE TYPES

Manufacturers	Replacement LED Bulbs				Architectural Fixtures			Decorative Fixtures		Others	
	A-Lamps E26/E27	PAR	BR	GU10/24 E14	Down-lights	Spots & Tracks	Linear Lights	Pendants	Others	Driver Modules	Switches
Philips HUE	◉	◉	◉	◉			◉	◉	◉		◉
TCP Connected	◉	◉	◉		◉						
Ketra	◉	◉		◉	◉	◉	◉	◉			◉
Xicato XIMXIG					◉	◉		◉		◉	

LUMIFI'S ONSITE CENTRAL CONTROLLER

3rd Party Controller with LumiFi Control Software
The LumiFi Controller is a central local hardware server that is physically connected to the local network. It is responsible for communications between different components of the system. It can be ordered online and needs to be installed onsite. A backup controller can be setup on the property.

LUMIFI FEATURE GUIDE

LUMIFI'S OFFERS FLEXIBILITY, SIMPLICITY & PERSONALIZATION

> LUMIFI'S MOBILE EXPERIENCE

LumiFi's lighting control software allows the client to manage their lights through mobile connected devices as well as from a web-based lighting management platform. You can select from the following features:

Award-winning Intuitive Interfaces
LumiFi's interfaces have received multiple awards for its intuitive and purpose-build approach to focus on activities and lightmosphere's; the experiences that actually matter for an end-user.

LumiFi's award-winning and patented default light scenes
Our 12 award-winning default light scenes offer a pre-curated, full immersive experience with award-winning immersive graphics and patented lighting scene design logic.

Unlimited, flexible configurable Light Scenes
Unlimited light scenes that are flexible configurable in order, sequence, naming and look and can be customized to client's wishes.

Ability to personalize light scene settings & adjust them to a personal preference
Mobile Interfaces controlling and modifying colors for specific individual lights within a light scene to that personal preferences or to update the project defaults (numeric & graphic)

Schedule Features
Mobile Interfaces that allow a range of scheduling options: One-Time events, weekly schedule manager, sleep timers, wake-up alarms including astronomical time clock functionality

Ability to Reset Custom Light Setting to Defaults
Every light scene can be easily personalized to meet clients requirements. We offer the ability to allow to reset personalized settings to project / profile / template defaults. This way the overall design intent stays intact while it allows personalization.

Branded App Interfaces
LumiFi apps can be branded and white-labeled with client logos and custom screen interfaces and imbedding custom graphics onto the mobile app background.

White Labeling & Branding of Mobile Apps
LumiFi apps can be branded and white-labeled with client logos. The client's logo can be incorporated in the mobile app header or their information can be integrated in the mobile menu "About" Screen, an added benefit to client, which promotes brand recognition and awareness

> LUMIFI'S EASY-TO-USE SCHEDULING CAPABILITIES:

LumiFi's control software allows the client to seamlessly control, automate and schedule the light settings through the mobile connected device and/or the web-platform. This not only offers convenience and consistency in light settings, but also offers additional energy-saving benefits while eliminating the need for costly skilled programmers

In our web interface, you can simply drag & drop the mood into the weekly schedule calendar for any time and day you wish to schedule lights.

NO TRAINED TECHNICIAN IS REQUIRED TO IMPLEMENT ANY SCHEDULING FEATURE. IT ALL CAN BE SIMPLY HANDLED BY THE END-USER; NO ACCESS TO THE LOCKED PROGRAM IS REQUIRED.
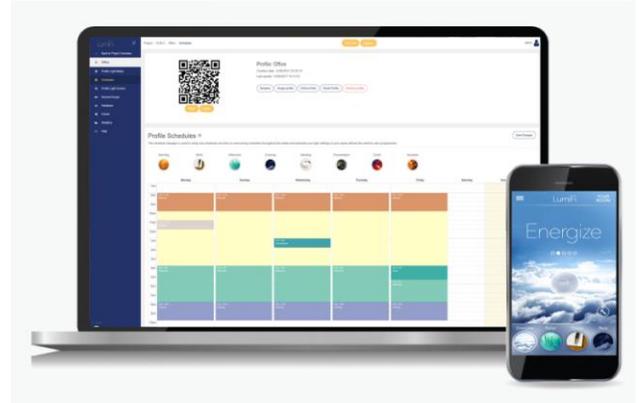
You can select from the following mobile scheduling features:

One-Time Event/Scheduling List
Ability of setting a one-time light schedule; light scenes can be changed in relative and absolute time.

24/7 Schedule Manager
You can automate light scenes of your profile in a weekly schedule manager and intuitively manage them. Set your various light scenes throughout the week by dragging a lighting scene into the schedule. This feature is accessible through mobile and the web-interface.

Timer & Wakeup Alarm
Ability of changing light scenes in absolute time intervals e.g. 30, 60, 90 min and scheduling one-time light scene changes according to time of the day. For Guest rooms, the wake-up alarm is limited to a check-out time (default is at noon).

Astronomical Time Clock
Provides light scene selection based on the local astronomical time clock. Light settings and scenes can be set relative to local sunset and sunrise times. The system automatically recognizes its location.

> LUMIFI'S PROJECT USERS, ROLES & PERMISSIONS:

Our unique authentication process offers easy sharing of commissioned profiles with their space and light settings across multiple devices and users with different roles. An installer just needs to do a one-time setup that is uploaded onto our web-platform and then hosted on our cloud. LumiFi's unique software architecture, allows multiple users access with dedicated permission levels. Our standard project has 3 default roles (Guest, Manager, IT Admin), but additional custom roles and logins can be created if as needed.

Profiles Authentication
Anonymous access via QR-Code scan is available per room or profile as defined by project. Profiles can be easily shared through email or printed or scanned directly from the screen.

Hosting & setup of Profiles across multiple users and spaces
Ability to easily share project configurations across multiple users or user roles through our QR code. A QR code can have different roles and permissions attached to them.

Personal Log-ins or Log-ins by Role
Our unique Profile Authentication allows for personal logins with different permissions for different users. It offer easy sharing of commissioned profiles across multiple devices and people. Please contact the LumiFi admin to specify and setup the users for your project.

Customized Roles & Permissions
New user types and permissions can be added based on your project needs. For example, cleaning personnel mode allows the staff to change only to a specific scene while cleaning. Once completed, the scene automatically returns to default.

> LUMIFI'S WEB-BASED LIGHT MANAGEMENT TOOLS

Project Profile Overview
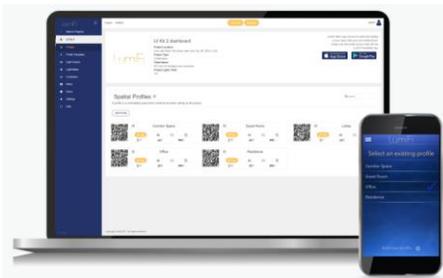
Each project includes a number of "Spatial Profiles" and/or "Templates".

A spatial profile is a controllable space that is defined when setting up a project and has its own unique and sharable access credentials.

A Profile can have multiple users, each with a different set of permissions based on the user's needs.

Light Edits & Personalization
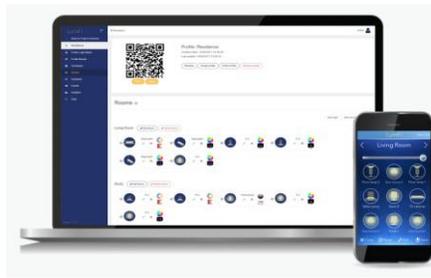
Lights can be easily rezoned, renamed or reordered by preference through a simple drag and drop interface. All lights are grouped by room and display clearly visible representative icon with fixture type, manufacturer and light type. The rooms can be easily reordered or renamed.
LumiFi's lights can be edited and personalized by profile.
Both mobile and the web-platform settings synching real time.

Central Light Matrix

The Light Matrix is an overview table in which all light settings associated to a profile, template, or project across multiple light scenes can be managed in one central location and interface.

You can edit each light or multiple light settings based on moods you have selected. You can select multiple lights to edit simultaneously. Selecting light and room name allows you to search and edit the light settings.

Light Scene Management

Light scenes can be easily enabled and disabled in our web-platform as well as reordered and changed to the user's personal preferences by simple drag and drop. The order updates in the mobile apps menu selection or as swipe priority. Here the light scenes can also be renamed.
Custom backgrounds can be uploaded and added on a project level and be enabled through an intuitive click in each profile or template.

Room Profile Manager
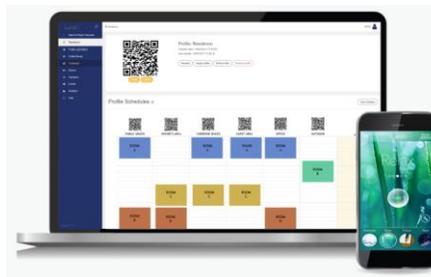
This feature allows to assign and manage rooms and groups across multiple profiles. Through an easy drag and drop rooms/groups can be associated to different profiles. Hardware can be shared across multiple profiles in the same way.

Hardware Manager

All Hardware is managed in one central interface. Each section configures itself to the specifics of each manufacturer requirements. Here gateways, lights and controllers are added and mapped depending on the technology used.

This functionality is typically only available for IT Managers to commission or edit the technical parameters.

> LUMIFI'S DEFAULT LIGHTSCENES & AWARD-WINNING INTERFACES:

The Light Scenes have a patented selection of dimming & color tuning functionalities that are pre-assigned to the lights in a space depending on the type and location (floor, ceiling, pendant, …) This saves time in programming the light scenes as it automates the process. You can start with any light scene and modify it as you please or even start from scratch. There are 12 Default Light Scenes, 6 Event & Special Occasion Light Scenes to choose from:

> ADDITIONAL INTERFACES:

Voice Control
Control your lighting with voice commands. LumiFi has a partnership & integration with the leader in commercial based voice control solutions.

Mobile App Kiosk Mode
Turn a mobile device into a dedicated lighting control interface or scene switcher by locking down the phone and the home screen to solely open the LumiFi app and restrict access to other sections of the Smartphone.

Explore Mode
LumiFi's User Experience Mode allows to explore the mobile experience of any project with uncommissioned hardware. The project can be setup as either 'User Experience Mode' or as a 'Design Project'. Simply scan the access code.

> OTHER INTEGRATIONS:

Web / Cloud API
Web-based API for integration with 3rd party services; supports scene- and group/room-based light management with ability to turn them off, change brightness or recalling a scene.

SDK Integration (Software Development Kit in Android)
Our lighting control logic can be integrated into other eco-system Apps (e.g. Brand Apps) through our SDK, a library of commands to enable lighting control inside other applications (plug & play approach).

> SELECT PROJECT ANALYTICS FEATURES (in beta):

In our professional version we have the ability to enable analytics features through our onsite controller such as:

Monitoring and status updates of lights
Monitors the status of lights to ensure reliable and efficient system operations.

Hardware inventory tracking and reporting
Monitors light status and sends alerts to property manager when lights go offline due to breakage, relocation, or theft.

Energy consumption dashboard and reporting
Monitors and displays wattage consumption to visualize and understand energy savings.

User activity reporting
Reports user lighting preferences over time and the selected light scenes.

> TOOLS TO STREAMLINE THE PROJECT SETUP & COMMISSIONING

LumiFi's web-based interface is much simpler to use saving time and expert knowledge when initially commissioning lights and when ongoing managing the light settings given the publishing of light setting feature is enabled by the manufacturer:

Easier visual and intuitive commissioning tool
LumiFi web-based interfaces uses graphically intuitive drag and drop capabilities allowing less expert trained users to work with the system. Our info tool tips and guided tour allows for quick learning & training.

Patented Pre-configured Light Scene Configuration
Offering of pre-configured light scenes by fixture type and location (Patented) simplifying and reducing initial setup and programming time saving the installers & lighting designers time and the clients money.

Central web-based property control interface for all lights
Across multiple hardware networks and universe and user profiles in real-time.

Automated Light Scene Configuration Logic & Pre-programmed Default Light Scenes
Through our patented algorithm and learning logic we offer pre-programmed, space-specific light scene configurations and their personalization's. This streamlines the commissioning process and saves substantial programming time.

Use of templates to simplify, streamline and speed up commissioning
Templates groups similar settings into one standard that can be used to apply changes quickly across multiple profiles. It's a great tool to streamline the commissioning process and apply settings across the project. Its ideal for hotel rooms, corridors or office spaces.

In-App Commissioning & programming of light settings of Profiles & Templates through the mobile app.
(provided publishing is enabled)
We enabled the commissioning of profiles through our Apps. Any user with IT permissions can easily upload or update profiles to our cloud hosting platform and edit or fine-tune them there.
Templates are setup in our web-platform and can easily be scanned in our app, modified, edited and commissioned and then uploaded to LumiFi's hosting platform as profile or updated template.

Remote Project Setup & Access
Remote off-site configuration ability of projects reducing travel & onsite time & costs with real-time synching capabilities.