Project		Catalog #		Type	
Prepared by		Notes		Date	

Fifth Light

Lighting Management Software

Allows facility managers to design, configure and maintain their facility's lighting system

Typical Applications
Office • Education • Healthcare • Hospitality • Retail • Industrial • Manufacturing

Interactive Menu

Product Certification

Supported web browsers:

- **Internet Explorer: 11+**
- **Google® Chrome 40+**
- **Safari 8+**

Product Features

powered by fifthlight technology

Top Product Features

- Control lights on an individual or on a group basis
- Apply lighting scenes for presentations, reading or other preferences
- Regulate access based on user profile
- Monitor ballast and lamp status, email alerts and reports
- Exchange data with Building Automation Systems
- Support many phones on same network with smart detection algorithms
- Web-based software allows access from any network connection
- Fifth Light's Lighting Management Software (LMS) allows facility managers to design, configure and maintain their facility's lighting system. The LMS governs all the devices connected to the Fifth light lighting control panels and the control strategies for each of these devices. Using this intuitive, web-based software application, facility managers are able to easily analyze the building's lighting system usage and quickly update the system to improve the energy consumption.

Order Information

Catalog Number

Catalog Number	Description
FLT-LMS414	Lighting Management Software

Notes

1. BACnet Integration requires BMS Pro 2 module. Refer to the BMS Pro 2 datasheet for more information.
2. Refer to the Local Controller datasheet to learn more about the hardware
3. Refer to the Central Manager datasheet to learn more about the hardware hosting the LMS software application
4. Refer to the Virtual Central Manager datasheet to learn more about the virtual environment supported by the image.

Product Specifications

Key Features

- **Control lights on an individual or group basis –** Allows tenants to personalize the light levels for each light fixture or groups of fixtures based on their preference. This can be done from various devices such as any computing devices with one of the supported web browsers and Touchscreens.
- **Repurpose spaces without any physical rewiring–** Eliminates the costs associated with re-wiring devices when a space is redesigned by taking advantage of DALI's addressability property and LMS's ability to group digitally fixtures, occupancy and daylight sensors.
- **Web-based user interface –** Eliminates the need to install any software on computing devices. This enables users to securely access the lighting management software from any device with a valid web browser.
- **A rich portfolio of standard-based and proprietary interfaces –** Allows system integrators to easily integrate the lighting control system with building automation systems via BACnet/IP, shade control systems (Mechosystems®, Somfy®), A/V systems (via contact closure or XML interface),Cisco® IP telephone systems, generator switch gears and any other third party systems via andvia JSON and XML based REST services as well as XML based SOAP web services.
- **Built-in energy reports focused on the entire building all the way down to the individual fixture and user –** Allows users to quickly evaluate the lighting system's energy/power performance performance from a campus level all the way to individual fixtures using the calculated energy/power data or metered data obtained through power meters via BACnet/IP.
- **Up to 500 simultaneous users –** Allow users to easily change the lighting levels and mood within a space via a simple press of a button on a switch, touchscreen or web application or third party applications. The access to the various control features are regulated on a user profile basis.
- **Up to 5 simultaneous facility managers –** Allows a single lighting control system to be shared by multiple tenants. Each tenant able to customize the lights within their area without having to rely on a facility manager.
- **Import AutoCAD (DXF) files with smart fixture recognition –** Reduce non-value added engineering by leveraging the AutoCAD drawings of each floor and the content available on these drawings such as device location and device type.
- **Security –** End-to-end 256 bit encryption and SSL support offer enhanced security and compliance with stricter corporate IT security policies.

Software Specifications

Supported web browsers:

- Internet Explorer: 11+
- Google® Chrome 40+
- Safari 8+

Central Manager/Local Controller

Operating System:

- CentOS 6.5

Java Version:

- Java JDK 7 u 67

Application Server (only on Central Manager or standalone local controller):

- JBoss 6.0

Java Version:

- Java JDK 7 u 67

Screen Resolution:

- 1024 x 768 or higher

Warranty

One year warranty

Lighting Management Software Suite

The Fifth Light Lighting Management Software Suite allows users to design, configure, commission and manage their facility lighting control system through an intuitive web-based user interfaces that can be securely accessed from any computing device connected to the lighting control network. A centralized management approach significantly simplifies day-to-day operations resulting in a low cost-of-ownership.

The LMS assumes the roles of the system manager, system gateway and security manager.

As a system manager, the LMS governs the lighting system and all devices connected to the system. This includes DALI, low voltage and ethernet based devices, i.e. 0-10V ballasts/drivers, DALI Field Relays, DALI digital to analog converters, DALI dimming modules, DALI and 0-10V occupancy and daylight sensors, DALI and 0-10V wallstations, Fifth Light Touch Screens and other low voltage devices. It also allows users to analyze the energy consumption associated with their lighting system.

As a system gateway, the LMS handles the communication between the Fifth Light System and third-party systems. It offers a large list of standard-based and proprietary interfaces enabling communication with Building Automation Systems, A/V systems, Shade control systems and many other third-party systems. These interfaces include: BACnetBACnet/IP, Public (REST) API, SOAL XML web services, MechoNet RS-232 protocol, Somfy SDN RS-485 protocol.

As a security system, the LMS authenticates the concurrent users using user login to the system and ensures that they can only access the areas and devices allocated to these users.

Web Based User Interface

The Lighting Management Software Suite is composed of three web-based applications:

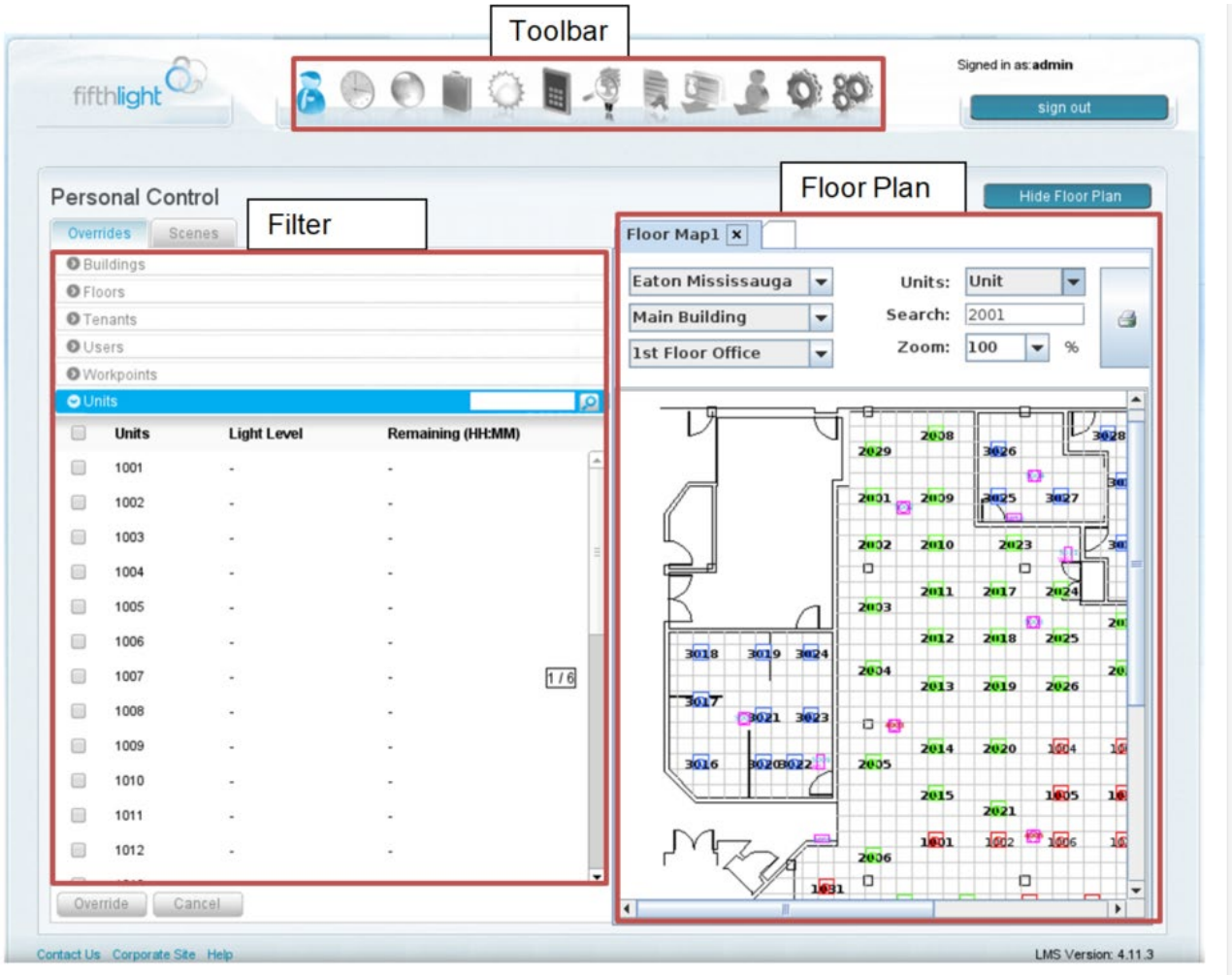
- Fifth Light Lighting Management Software Application
- Fifth Light Webmin Application
- Fifth Light LXI

All these applications are hosted on the Central Manager or Virtual Central Manager.

Lighting Management Software Application

The Fifth Light Lighting Management Software Application is the main application as it allows facility managers to easily add devices, program the system and monitor the system's performance.

To simplify the browsing of hundreds of data points provided by the system, the user interface has been carefully divided into three sections: the toolbar, the filter panel and the floor plan/tabular panel:



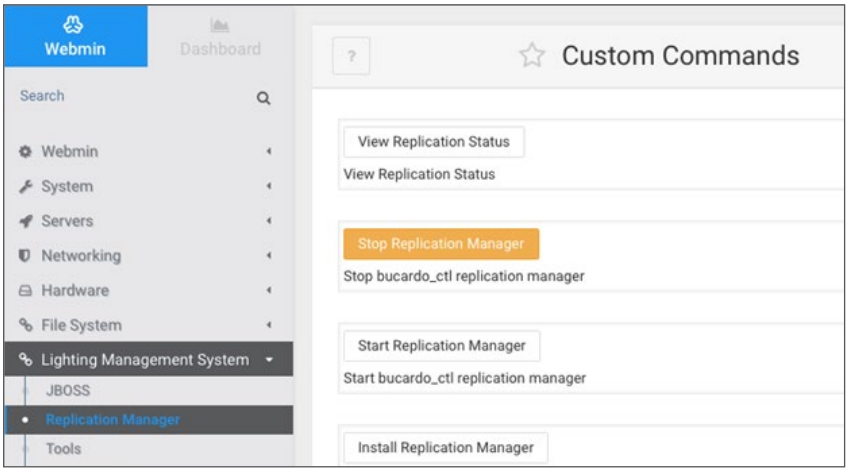
The **Toolbar** is how users navigate between the key system modules. The **Filter Panel** and **Floor Plan** is how users quickly select multiple devices on the system. Each module has a similar layout with the Floor Plan and Filter Panel being common throughout most of the program. Using the Floor plan, users can zoom into the floor plan to focus on a specific sub-area or device within the facility. Users can hover above a device to get various information with regards to the device (device type, schedule, occupancy, etc). **(See Fig 1)**.

Using a toolbar, users can access the various programming and management modules. The toolbar is comprised of the following main modules:

- **Personal Control** – Individuals can control the light levels in their workspace from their computer to suit their personal preferences and create the ultimate work environment.
- **Scheduling** – Using a calendar, users can schedule switching or dimming of lights in areas where occupancy control is not appropriate. Users can create multiple schedules that can be employed for areas as small as a room or even an individual light fixture. Users can also create diurnal schedules where the light fixtures will gradually increase/decrease throughout the day between 0.1% and 100% hence creating a circadian like stimulus and enhancing the way people live, work and play within the indoor spaces.
- **Occupancy Detection** – The user can define how lights and plug loads respond to motion or lack of motion detection by occupancy sensors. The system allows users to program lights so that they dim gradually upon vacancy detection or blink before shutting off as well as cutting power to non-critical plug loads.
- **Daylight Harvesting** – The user can associate lights with daylight sensors in order to automatically adapt to ambient natural sunlight to maintain a cost light level at desk height and save energy.
- **Workpoints** – Users can group lighting devices into workpoints for ease of use. A workpoint is a set of light units with an activation level for each unit.
- **Wall Mounted Controls** – The user can define how lights respond to a keypad or a switch, i.e. the light level or scene, toggle action, hold action and many other options.
- **Monitoring** – Facility managers can check, troubleshot and diagnose the operational status of every light fixtures of the lighting system. The monitoring utility can be set to run all the time so that a problem is detected as soon as it happens.
- **Reporting** – Facility Managers and tenants can view the calculated measured energy, power consumption and savings per device, area, floor, facility or campus. The reports can be exported as pdf and excel files. **(See Fig. 2)**
- **Tenant Setup** – The facility managers can setup different tenants per system and give tenants control over their section of the building or floor.
- **User Setup** – User can create user accounts and assign access privileges based on role and devices.
- **Commissioning** – User can address a replaced device, upload new programming changes to the local controllers and restart them, if required.
- **System Setup** – Facility Managers can create fixture types, peripherals, end device and control devices and configure them

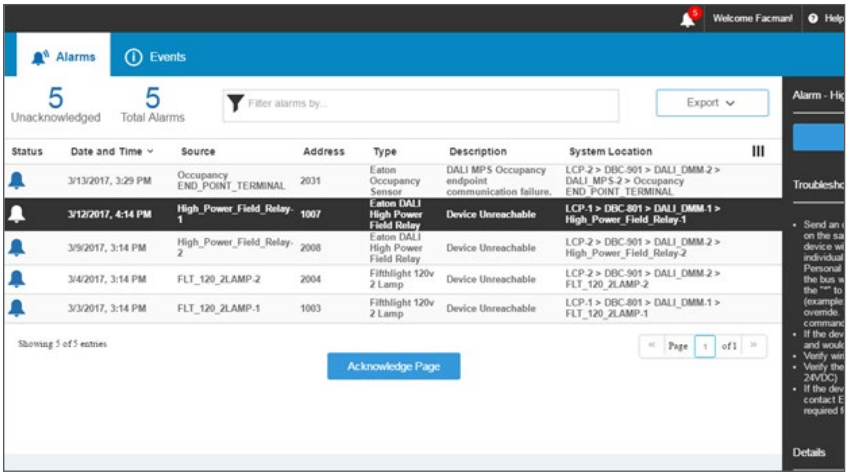
Webmin Application

The Fifth Light Webmin application is a system management application used to perform tasks typically performed via a Linux command line interface. The application allows user to perform system maintenance tasks such as changing the time and retrieving log files; Backing up and restoring the system configuration databases and centralizing multiple Local Controllers into a single Central Manager database.



Lighting Xpert Insight Application

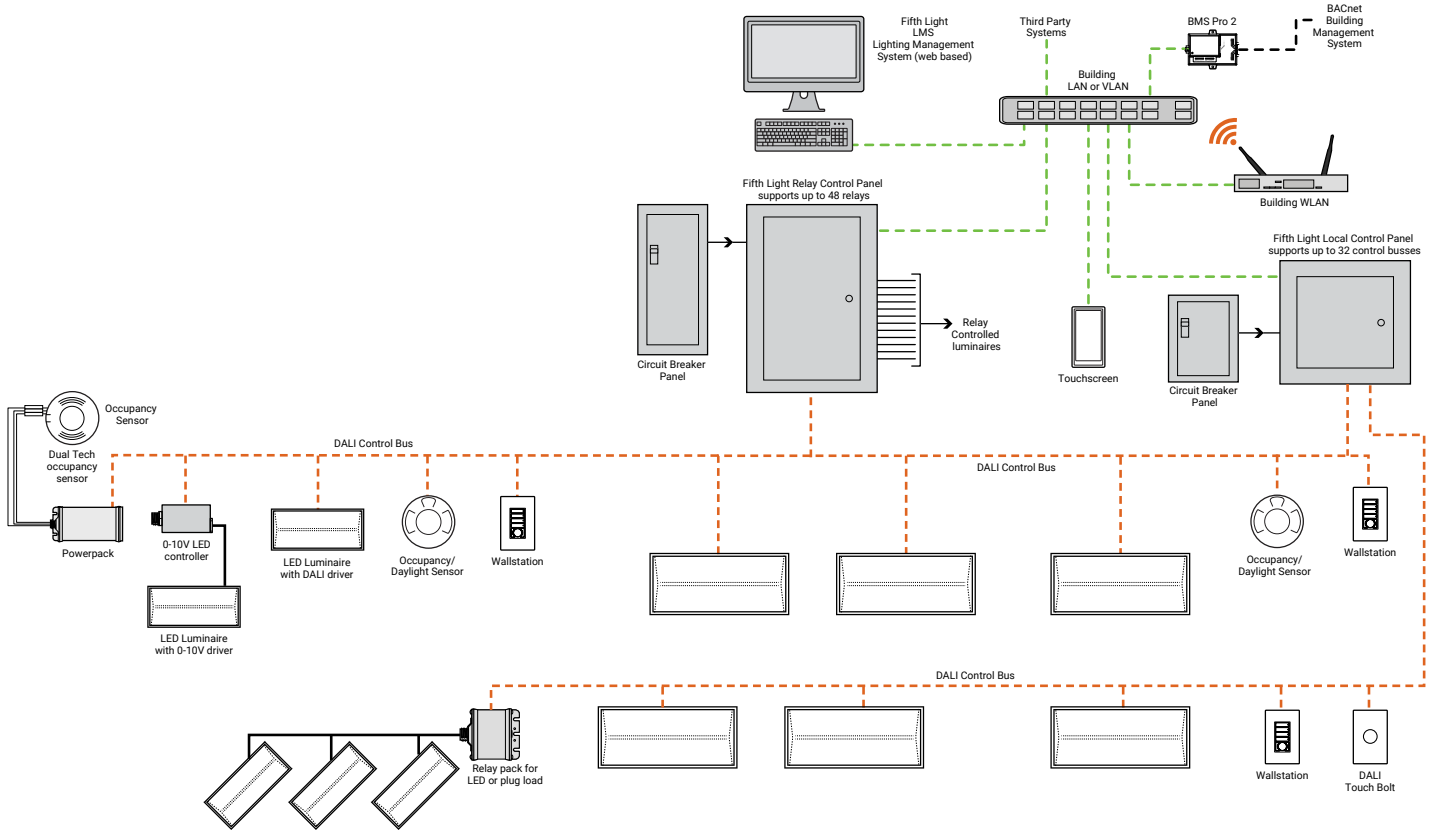
The Lighting Xpert Insight is an application used to view and manage the Fifth Light system faults reported as alarms. Users can view and filter the list of active and unacknowledged alarms and access helpful troubleshooting tips for a selected alarm. Users can also opt to get alarms as email notifications.



System Architecture

This diagram illustrates the main components of the Fifth Light system. The DALI wallstations, DALI multi-sensors, DALI field relay, DALI dimming module, DALI DAC and DALI dimmable drivers/ballasts communicate with the Lighting Control Panel over the DALI bus while the touchscreen communicates with the Central Manager via ethernet.

Complete Fifth Light system



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