Dialight INEM Quick Start Manual

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- ***DO NOT let any supply cords touch hot surfaces higher than cord ratings.***
- ***DO NOT mount near gas or electric heaters***
- ***Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.***
- ***The use of accessory equipment not recommended by the manufacturer may cause unsafe conditions.***
- ***DO NOT use this equipment for other than intended use.***
- ***Before changes to settings are made the user must take screen shots of what the factory setting are.***

SAVE THESE INSTRUCTIONS!!

- ***The operation and maintenance must be carried out by authorized personnel.***
- ***Repairs and Installation must only be carried out by a qualified electrician.***
- ***Only genuine Dialight replacement parts must be used when unforeseen repairs are required.***
- ***Observe the national safety rules and regulations during installation!***
- ***Earth Grounding is required throughout the install process. Failure to do so could void all warranties!***
- ***No alterations should be done without the agreement from Dialight Corp. Alterations other than written in this manual will void all warranties.***

Introduction

This manual is for orientation and a quick guide to the installation process and configuration of the Control and Monitoring INEM (Integrated Network Card with Embedded Monitoring). The INEM is setup for directly connecting to an Ethernet port or to the owners supplied Wireless modem for remote monitoring or a Dialight supplied Janus modem (pluggable on the interface Hub - not available for all models). There is no physical dry contact support with the INEM, there is a digital representation on the INEM web page. If there are dry contacts presently at the site then those can be left as a second method for alarming. The INEM can only be used with Dialight's Dual Medium Intensity, Red Medium Intensity or High Intensity systems. It cannot be used in conjunction with other RS485 remote monitoring systems.

Included in this manual:

- System overview
- System configuration instructions
- User Interface overview

NOT Included with the Dialight INEM:

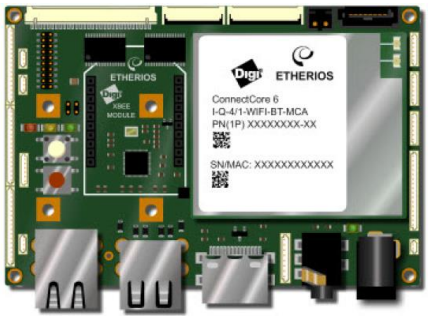
- 12Vdc battery or cables for Backup power
- #6 AWG earth ground cable when required
- Ethernet cable (shielded cable cannot be used for floating DC input powered version)

Table of Contents:

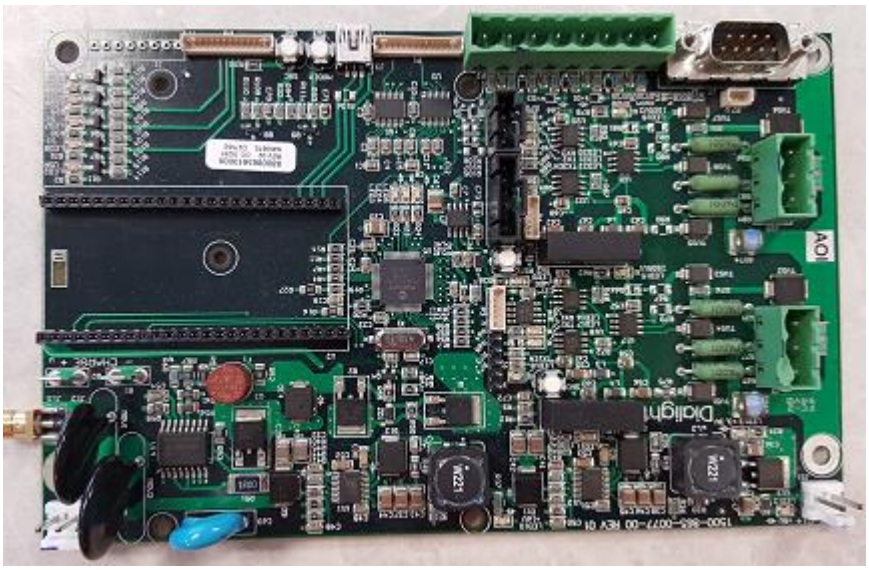
System Overview

Connection points (AC input version pictured)

Components of control and monitoring system



Digi SBC Connect6 i.MX6



Dialight designed interface hub

Janus Modem LTE910CF – (Dialight provided) – Not available or installed for all models.

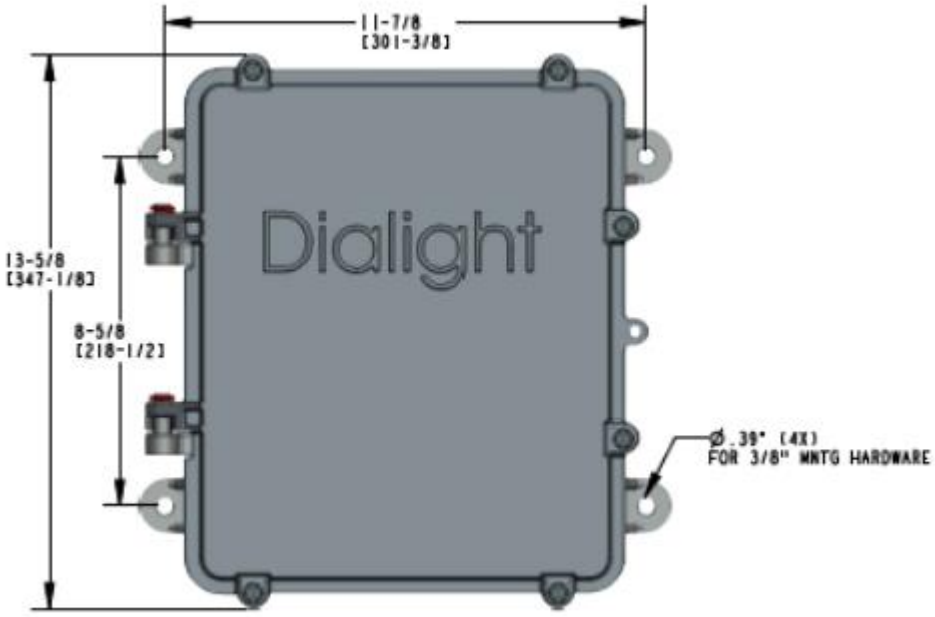
Electrical Parameters

The INEM is supplied in either of the two versions below. Refer to product label for operation

Input Voltage [VAC]	Absolute Maximum	Frequency
120-230Vac	100-264Vac	50/60 Hz
+/- 48Vdc (Floating)	40-60Vdc	N/A

Installation

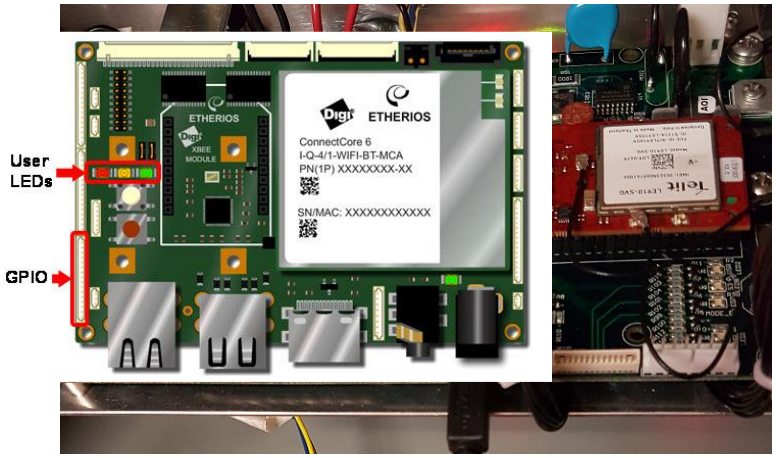
Mounting Information



Wiring of Monitoring System to the Main Controller:

1. Run the RS485 cable from RS485 terminal block to Dialight Lighting System controller board “From Master” connection point

2. If optional Janus modem (Dialight provided - not available for all models) is to be used - the modem needs to be plugged on to the INEM interface HUB (an extra 14pin connector between the SBC GPIO header and the interface hub P5).



3. For use with standalone wireless modem, connect to Ethernet port on Digi SBC

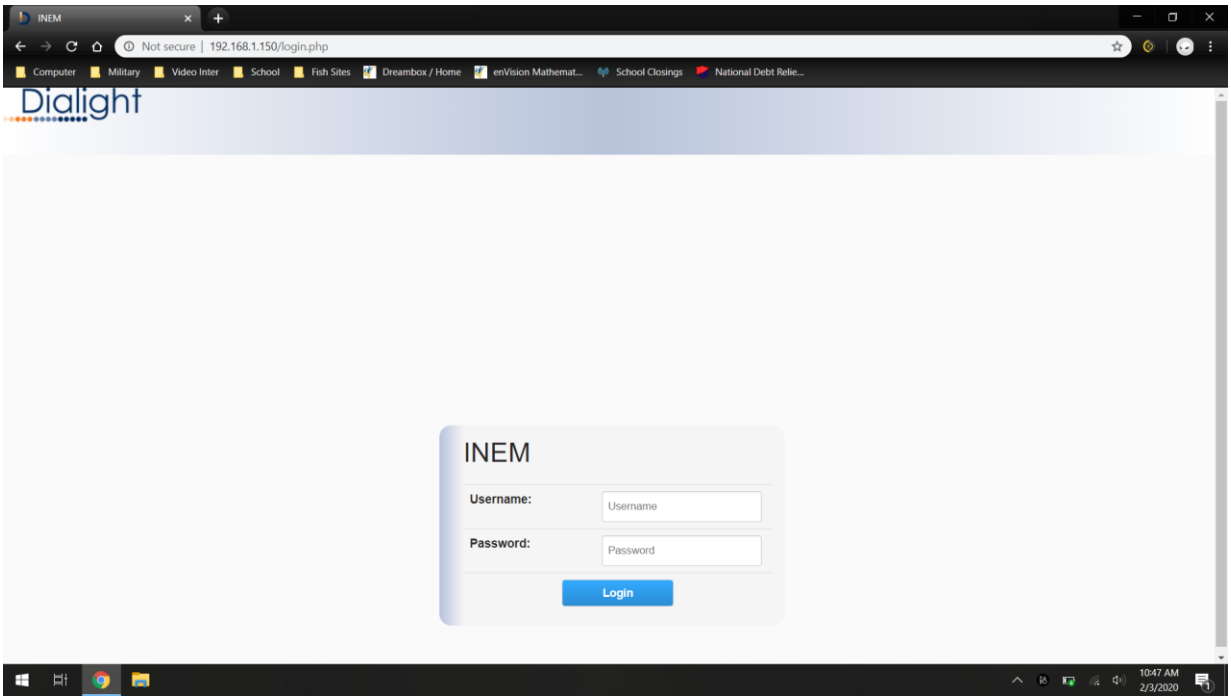
System Configuration

Connecting using the IP address

The INEM is provided with a static IP (192.168.1.150:9000) address if there is no Janus modem (not available for all models) installed- otherwise the IP of the INEM would be the modem IP. These Network settings can be changed, but it is advised to leave them as they are as changing them can disrupt communication

WARNING: It is highly recommended that screen shots are taken and saved before any changes are made.

INEM Secure Login Page



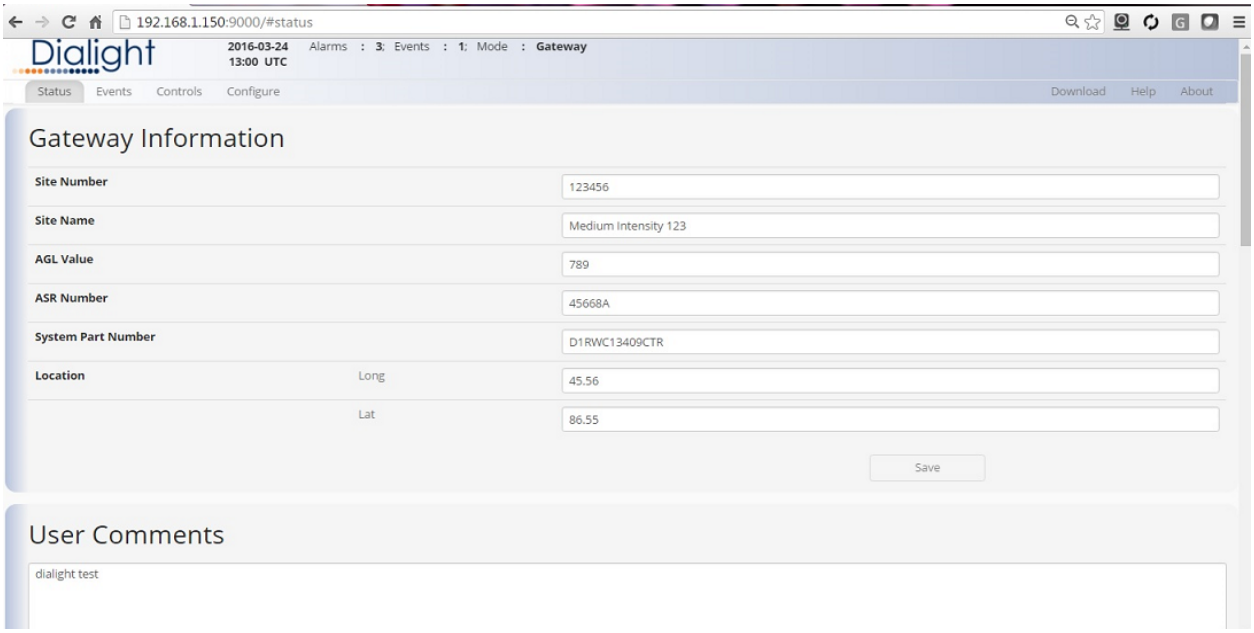
Default Username: admin
Password: di@lightINEM1

Selecting the tower style

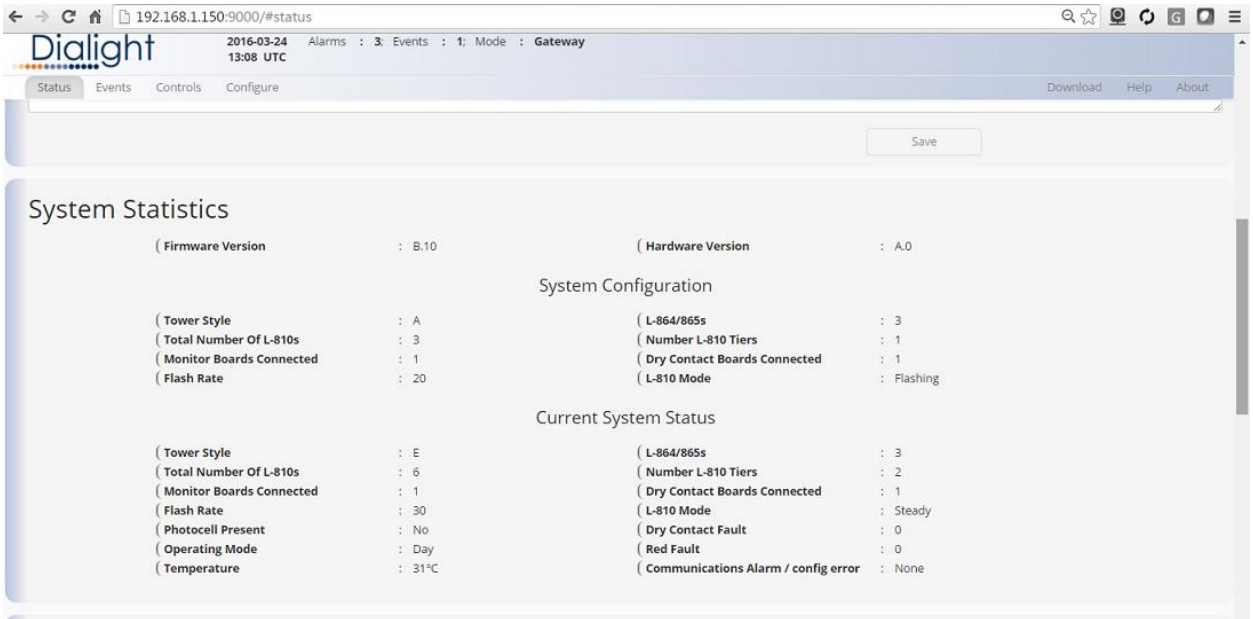
The INEM is set default for a Dual Medium Intensity system. However, the user is able to select use for Red Medium Intensity or High Intensity systems. To perform this function, see the “extra page” instruction in the INEM user interface section of this quick start manual.

INEM User Interface (GUI)

Status Page



In the figure above the user can enter the site and system information. The user can also add any needed comments.



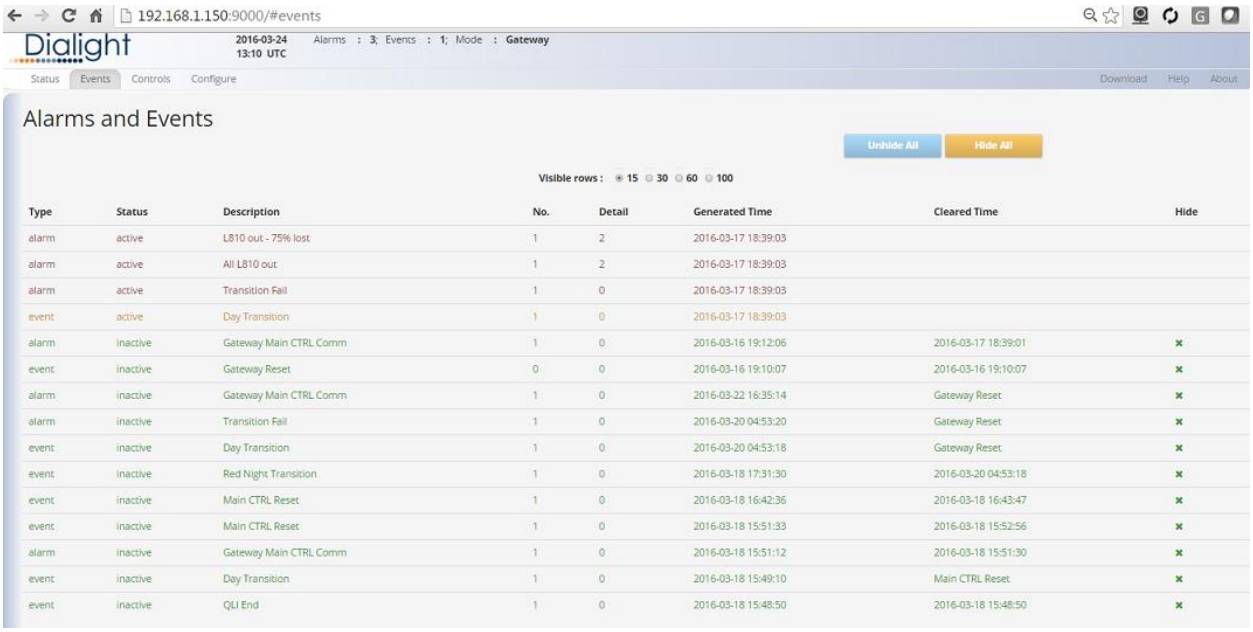
The figure above show the system statistics and how many devices we have in the installed system.

It also shows if there are faults on the system, temperature, tower style and mode.

For High Intensity system – this section will show parameters of each High Intensity Beacon module and power supply. Arranged in tiers of 3 complete beacons, each with three individual modules (flash head layers)

This figure shows the L810 current matrix that will show the calibrated and the present current values of the connected L810s on a single port.

Events Page

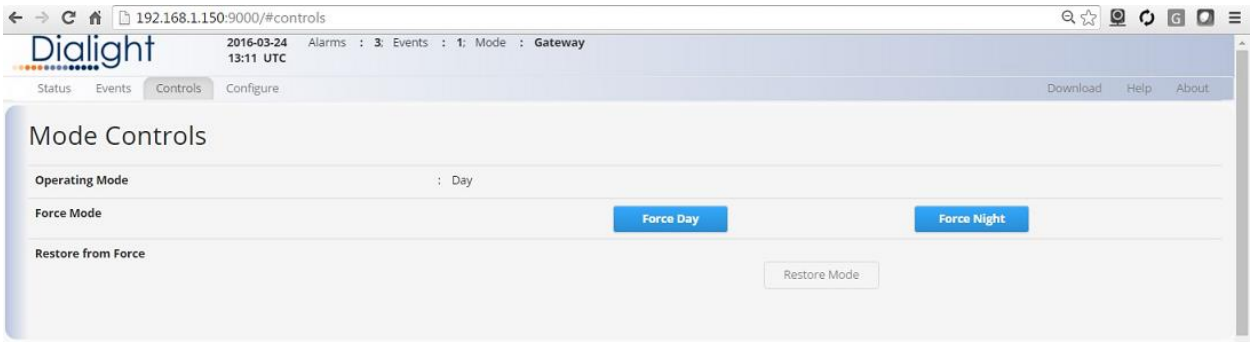


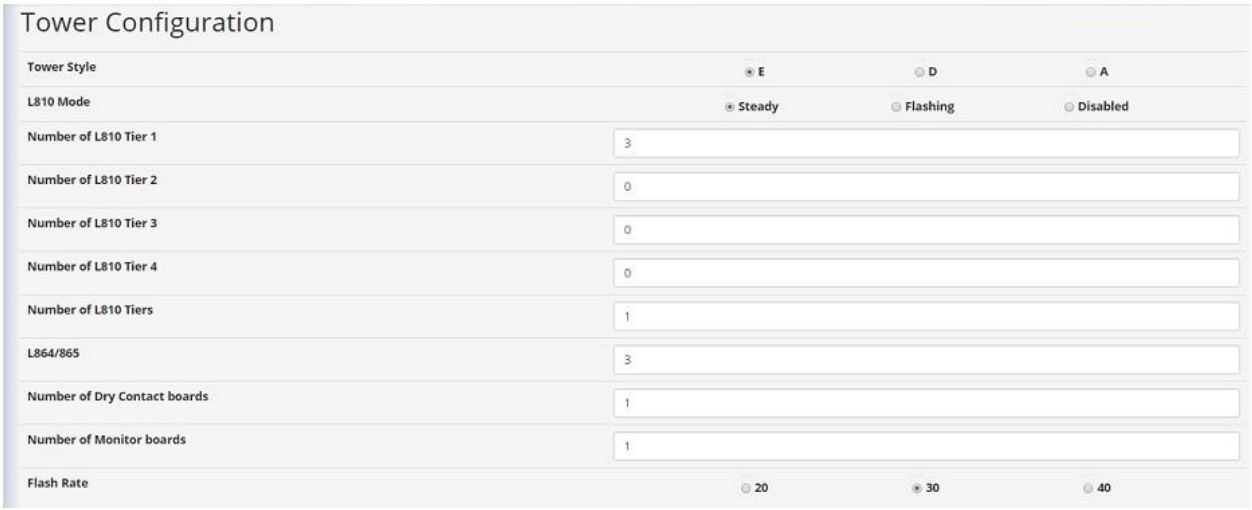
The events Page shows the alarms and events that are happening on the system

Alarms come up in red color if active and Green when cleared
Events come up in yellow color if active and Green when cleared

The user can set the amount of alarms and events shown on the page.
The user can hide the cleared alarms/events and view all the alarms/events

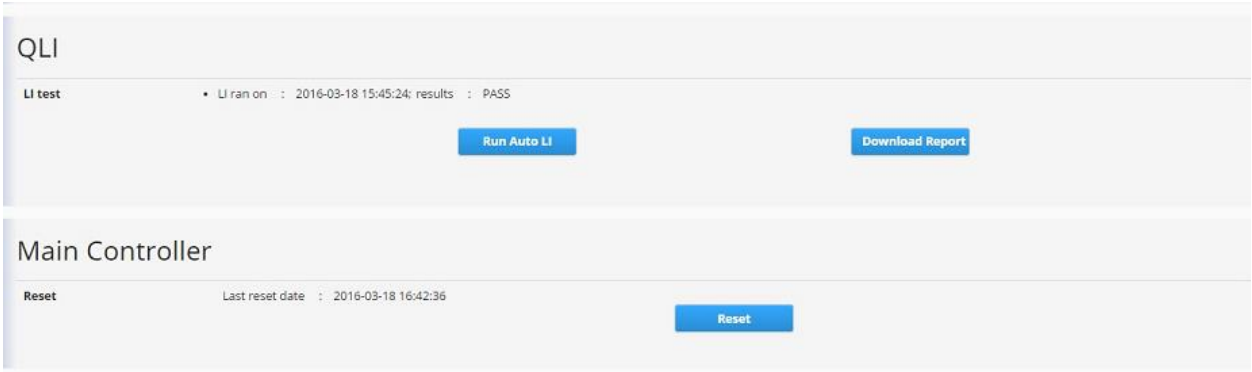
Controls Page





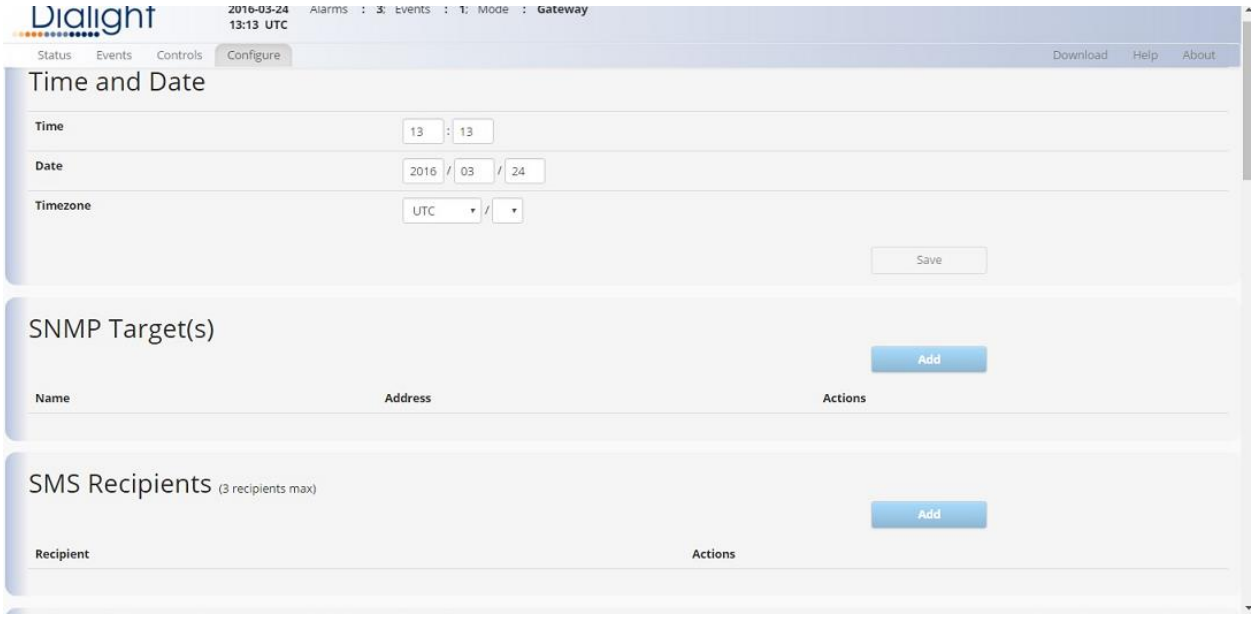
The user can use the controls page to force modes (day/night) on the system

This page can also be used to change the Tower style, the number of connected devices, FPM (red night), L810 mode (steady, Flashing or disabled)

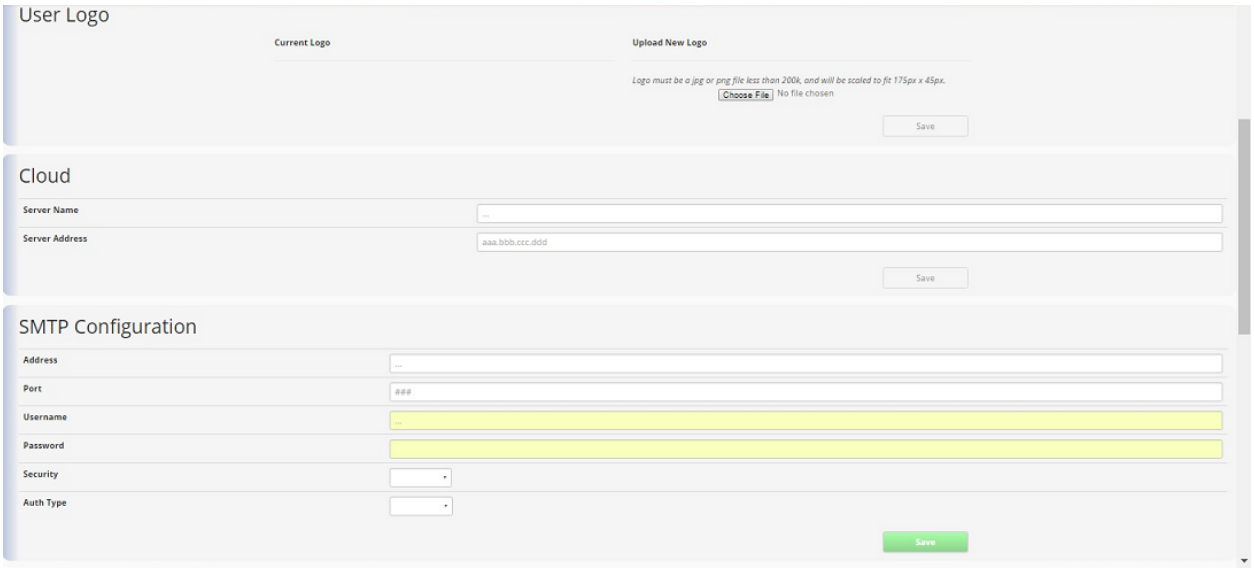


The user can run an Automatic Light inspection test. A LI report can be downloaded (.csv file format).
The user can reset the main controller remotely (not recommended in the middle of a Light inspection test)

Configure page



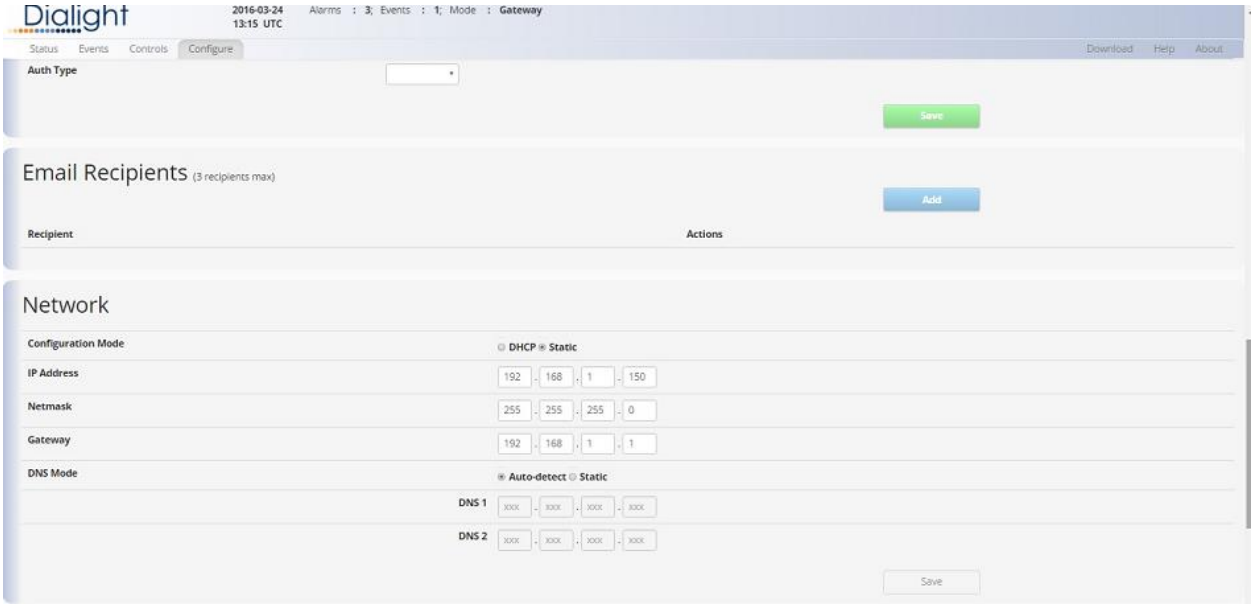
The user can set the system time and date remotely from the configure page
The user can set and add the NOC IP in the SNMP target area to receive the traps
The SMS functionality is not available yet.



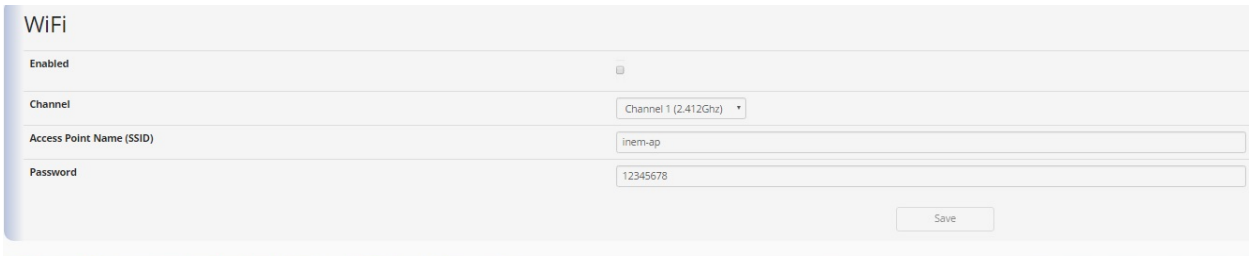
The user can add their company logo to the upper right of the INEM pages from the User logo area

The User can connect the system to be seen from the cloud if cloud is available (NOT AVAILABLE YET)

The user can receive emails in the occurrence of alarms/events (NOT AVAILABLE YET)



The user can reconfigure the INEM IP and network configuration.
This is not recommended if the Janus modem is connected (Not available for all models).
The IP will always be available on port 9000



The user can enable/disable the Wi-Fi radio on the INEM.
In case of enabling the Wi-Fi network of the INEM

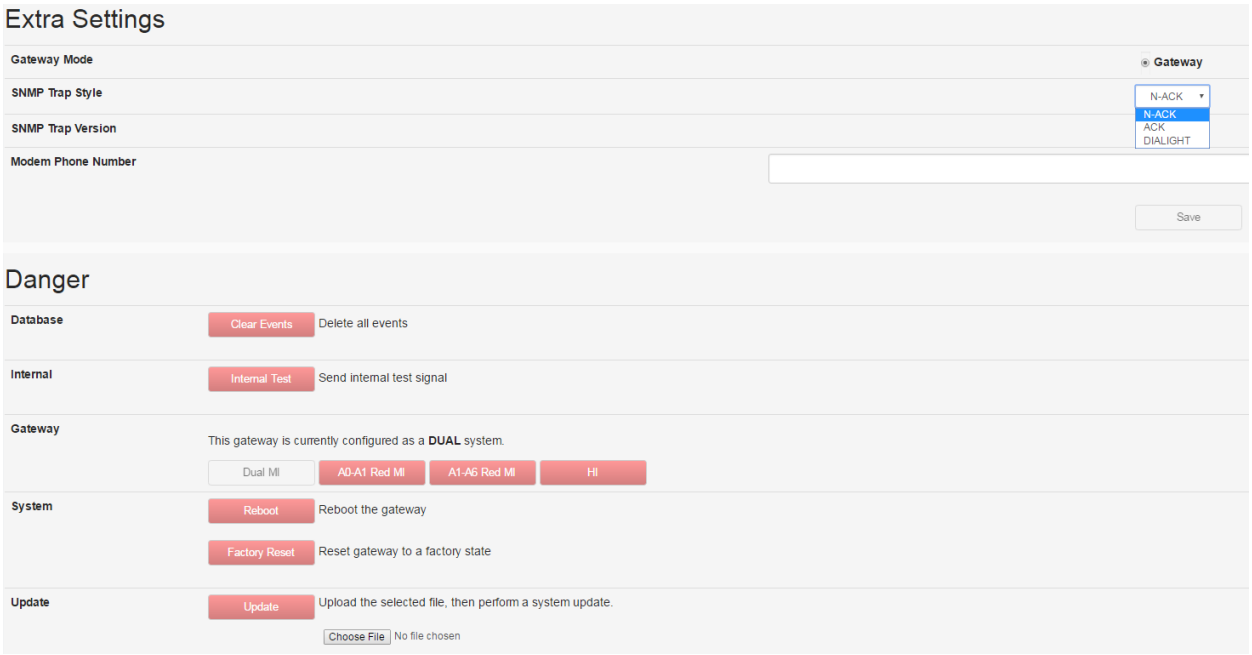
The user will need to

1. Click on the enable box
2. Enter the name of the Wi-Fi network in the Access Point Name (SSID) eg. inem-ap
3. Provide a password for the Wi-Fi network eg. 12345678

The user can change the password for login to secure their system. This can be changed at anytime based on end users policies.

1. Dialight recommends changing during initial installation so that the system is secure to maintain compliance with FAA regulation.
2. It is recommended to write this down somewhere secure so that the password can be looked up if forgotten.

Extra page

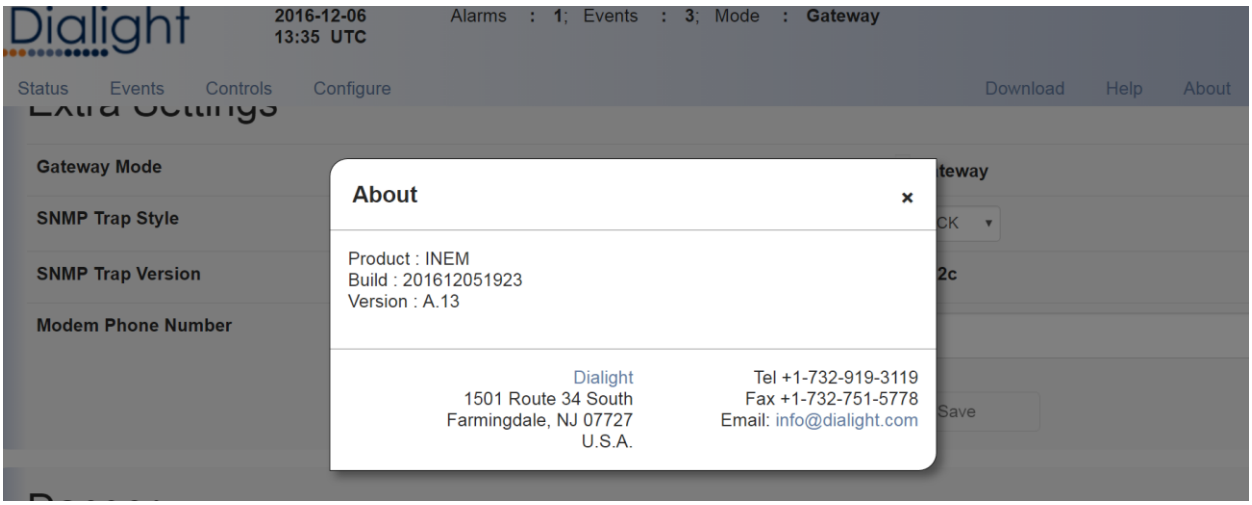


The extra page is hidden, to get to it you will need to append /#extra next to the IP eg. 192.168.1.150:9000/#extra

The extra page will allow the User to:

1. Select the type of needed SNMP style
2. Clear all events stored on INEM GUI
3. Send Internal Test Signal (NOT AVAILABLE YET)
4. Select the tower style (Dual Medium Intensity, Red A0-A1 (no LCD), Red A1-A6, High Intensity)
5. Reset the INEM to factory default, clear the database, reboot the INEM SBC, and Over the Air firmware update to the INEM SBC and/or the lighting system main controller

How to retrieve the INEM version number



The INEM revision can be obtained from the “About” link on the top right on the pages.

NOTES: all the pages information can be downloaded by the “Download” link on the top right on each page. The downloaded page will be in the form of “.csv”

REVISION HISTORY

REV	ECO No.	DRN	CKD	APP	QA	CM	DATE
A	33921	EK	SA	CV	JP	JN	03/25/16
B	36761	EK	SA	CV	JP	JN	06/30/16
C	40816	SA	CAG	KH	YS	JN	12/9/16
D	67165	NS	AV	AR	YS	JN	4/20/20