

# LIGHTING SOLUTIONS ENGINEERING



**clampco sistemi**  
LIGHTING ■ ENGINEERING ■ SOLUTIONS

# LIGHTING ENGINEERING SOLUTIONS

Lighting identifies our products. Engineering defines the way we develop. Solutions is the final answer we cater to fit customers' needs. What makes Clampco Sistemi so unique is the combination of these three features.

## LIGHTING

Since our organization is able to listen and learn, and aims to anticipate and respond to the changing customers' and systems' needs through constant evolution and innovation, we are continuously innovating our aircraft warning lights systems since 1989, driving our customers to the newest and best technologies.

## ENGINEERING

Engineering not only defines our way of developing, but it is the service we cater. Since our customers are the reason for our existence, delivering customer satisfaction is about providing timely, responsive engineering services with integrity, simplicity and a passion for excellence while meeting or exceeding the customer's expectations.

## SOLUTIONS

We are committed to being innovative. Innovation is the practical expression of imagination. It turns ideas into reality. We provide the engineering that supports this expression, seeing opportunities for innovation in our customers' solutions. When clients bring their application challenges to us, our engineers custom design, test and manufacture the right obstruction lights systems to meet their needs - following a process that has been proven across applications and industries for more than 25 years.





# VERTICAL OBSTACLES BY NIGHT

The obstruction lights of Isozaki tower, AKA "Allianz Tower", have been an element to be combined with the final vision of the architects of Milan. This added value is part of our know-how.

The aircraft warning lights are a new generation product designed and produced by our team of engineers to respond to a specific challenge of our customer: illuminate the highest point of Italy.

Nowadays, we have earned a reputation for delivering the best solutions of aircraft warning lights systems, but we trust that our strength is to provide real effective solutions, not only very highquality hardware. Our approach helps customers to fully understand the various technology solutions and the consequences of decisions: it helps to identify uncertainties and results in better understanding of the technical and regulatory requirements.



## MIOLB-M1\_xxS

Single Medium Intensity Obstruction Light

Order code	MIOLB-M1_xxS
Light source	LED
Type of beacon	Flashing
Light intensity	2,000 cd
Input voltage	12, 24 ÷ 48 Vdc, 110 - 230 Vac
ICAO	ANNEX 14, VOL I; MEDIUM INTENSITY TYPE B
FAA	AC 150/5345-43F; TYPE L-864

## NVG Compatible



## LIOLB-P1\_xxS

Single Low Intensity Obstruction Light

Order code	LIOLB-P1_xxS
Light source	LED
Type of beacon	Steady
Light intensity	> 32.5 cd
Input voltage	10 ÷ 60 Vdc, 110 – 230 Vac
ICAO	ANNEX 14, VOL I; LOW INTENSITY TYPE B
FAA	AC 150/5345-43F; TYPE L-810



## MIOLB-M1\_xxS

Medium Intensity Dual mode Obstruction Light

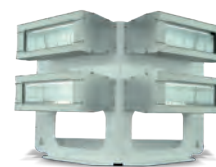
Order code	MIOLB-M1_xxS
Light source	LED
Type of beacon	Flashing
Light intensity	2000 cd
Input voltage	12 Vdc, 24 ÷ 48 Vdc, 110 – 230 Vac
ICAO	ANNEX 14, VOL I; MEDIUM INTENSITY TYPE A/B
FAA	AC 150/5345-43F; TYPE 864 & 865



# VERTICAL OBSTACLES BY DAY


If we redesigned the obstruction lighting system of the tallest building in Italy, Unicredit Tower, enlightened in 2009 with a medium-intensity lamps configuration, today we would definitely consider the high-intensity option which, thanks the efficiency of the new LEDs, can guarantee over 250,000 cd for day/twilight/night time marking.

When clients bring us their challenges, our engineers design the best engineering solution and succeed in satisfying them as the result of a process that has been tried and tested with thousands of applications installed worldwide. Over the years we have earned a reputation for delivering the best solutions of aircraft warning lights systems, and we trust that our strength is to provide real effective solutions, not only very high-quality hardware.



**HIOLA-M1\_23SxT**


High intensity white  
obstruction light

Order code	HIOLA-M1_23SxT
Light source	LED
Type of beacon	Flashing
Light intensity	200.000 cd day 20.000 cd twilight 2.000 cd night
Input voltage	110 – 230 Vac
 ICAO	ANNEX 14, VOLUME I TYPE A - HIGH INTENSITY OBSTACLE LIGHT



**MIOLA-M1\_XXDC**

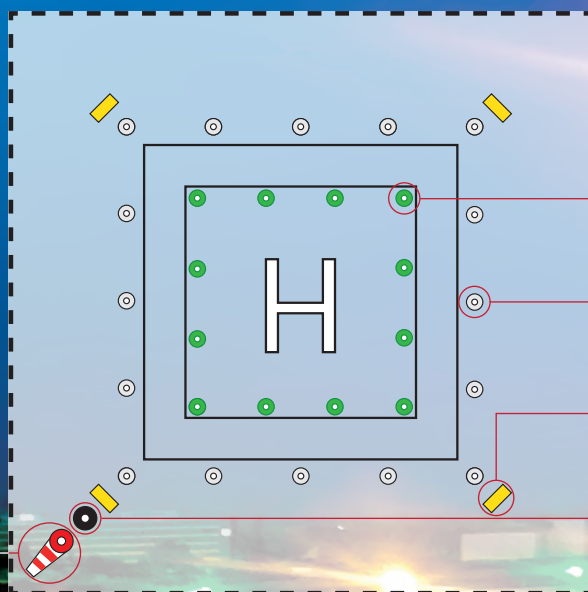
Single Medium Intensity  
Obstruction Light

Order code	MIOLA-M1_48S
Light source	LED
Type of beacon	Flashing
Light intensity	20.000 cd day mode 2.000 cd night mode
Input voltage	48 – 55 Vdc
 ICAO	ANNEX 14, VOLUME I MEDIUM INTENSITY OBSTACLE LIGHT

# HELIPORTS

+30 years of experience with lighting solutions for telecom and building fields allowed us to respond quickly to a new venture, when a few years ago a customer of ours asked us to provide a visual aid solution for heliports.

Our successful response turned into a tangible reality and we can design and manufacture the full range of lighting for heliports starting from TLOF, FATO, floodlights, beacon lights, wind direction indicators.



## NVG Compatible



### TLOF

Touchdown and lift-off area lighting system

Order code TLOF-M2\_24Sxx

Light source LED

Type of beacon Steady

Light intensity >30 cd (10%, 30%, 100%)

Input voltage 24 Vdc



ICAO ANNEX 14, VOL II

## NVG Compatible



### FATO

Final approach & take-off area

Order code FATO-M2\_24Sxx

Light source LED

Type of beacon Steady

Light intensity >100 cd (10%, 30%, 100%)

Input voltage 24 Vdc



ICAO ANNEX 14, VOL II



### FLOODLIGHT

Landing and loading activities

Order code FLOOD-M1\_23S

Light source LED

Type of beacon Steady

Light intensity 27,500 cd

Input voltage 110 - 230 Vac



ICAO ANNEX 14, VOL II



### BEACON

Long-range visual guidance

Order code SEGS23H2K

Light source LED

Type of beacon Flashing (H morse code)

Light intensity >2,500 cd (10%, 30%, 100%)

Input voltage 110 - 230 Vac



ICAO ANNEX 14, VOL II



### WINDSOCK

Heliport tiltable windsock

Order code WSB\_3660\_AL

Light source LED, white light

Type of beacon Steady

Input voltage 230 Vac

Type of mast tiltable

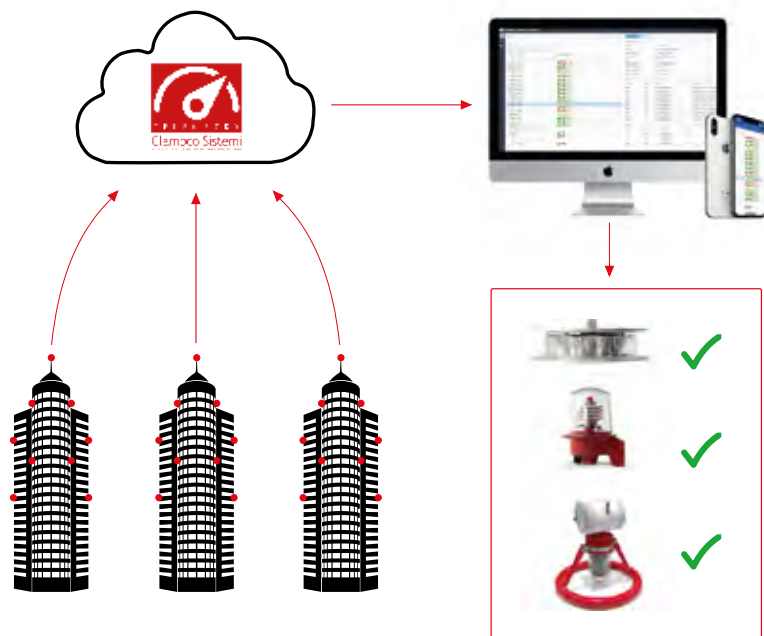


ICAO ANNEX 14, VOL II



# TELEMETRY SYSTEM

## REMOTE MONITORING AND CONTROL



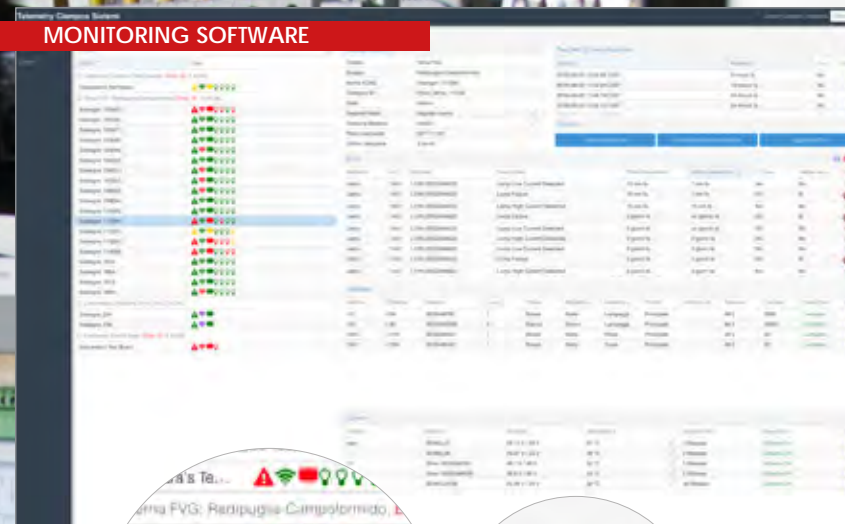
Telemetry consist of:

- solar powered obstruction lights (no wired connection required);
- control board (control unit + wireless modem);
- monitoring platform in the cloud.

Telemetry collects a large scale of data on real time, from several geographically dispersed obstruction lights, allowing:

- to know the status of the lamps (on or off);
- to know the health of the lamps (alarms, open case, battery voltage, temperature);
- to perform tests (on/off lamp test);
- to contact our engineering team available 24/7 for any kind of query.

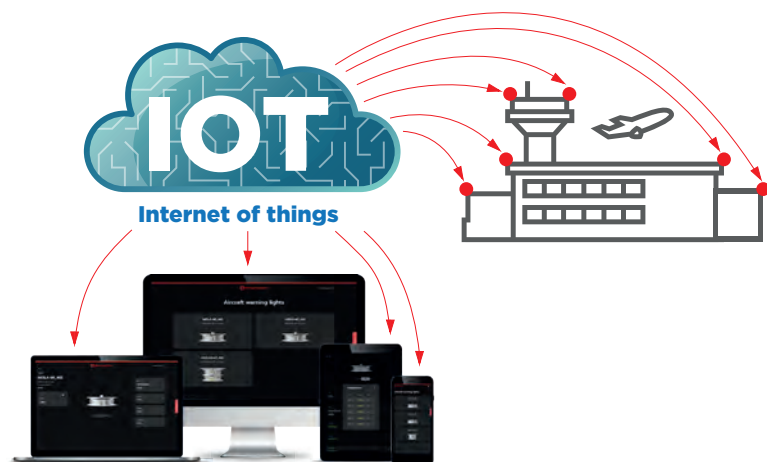
## MONITORING SOFTWARE



# INTELLIGENT OBSTRUCTION LIGHTS



## REMOTE MONITORING AND CONTROL

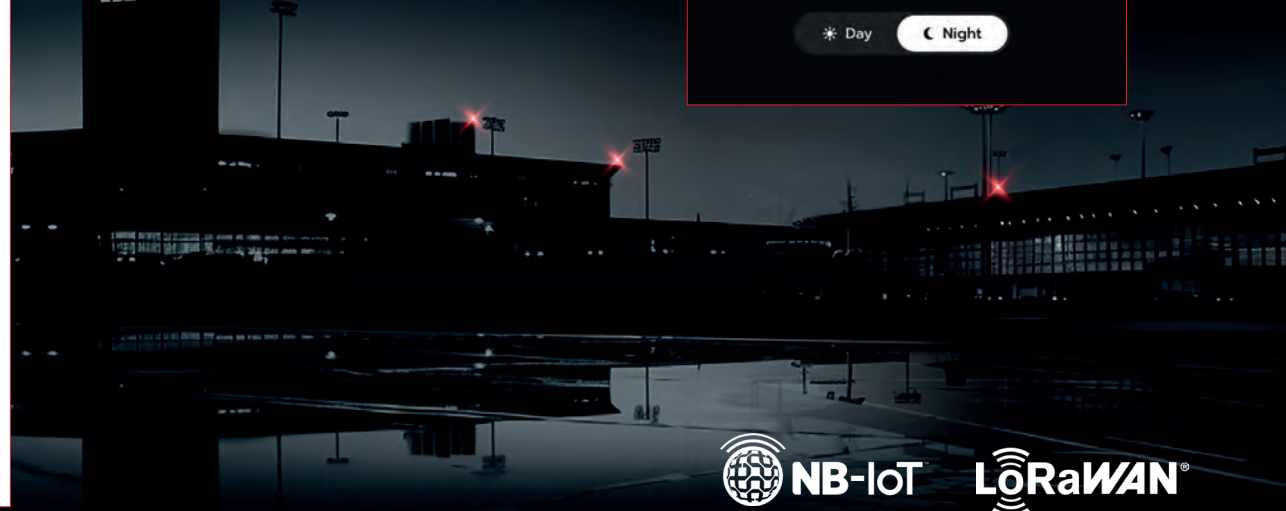
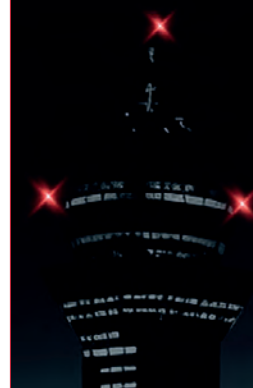
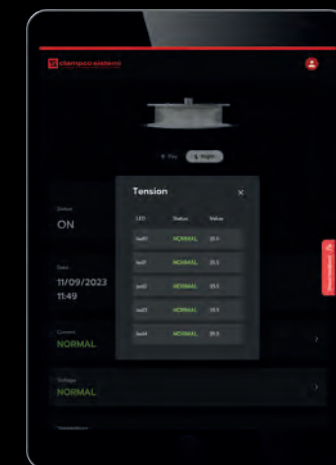
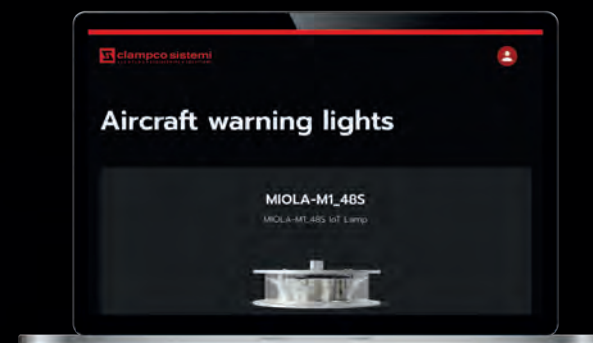


### IOL, Intelligent Obstruction Lights

The state-of-the-art in remote monitoring is embodied by the Intelligent Obstruction Lights (IOL), lamps that no longer require a control panel for operation, because all control and monitoring technology is integrated within the lamp itself, also enabling wireless connections (NB-IoT or LoRaWAN) to the cloud network.

Once the lamp is connected to the power network, accessing comprehensive information regarding its operation is simple utilizing a smartphone, a tablet or a personal computer. This includes critical data such as:

- the operational status of the lights (whether they are activated or deactivated)
- health metrics (including currents, voltages, and temperatures of each individual light module).
- Alerts if the monitoring system detects any problems with the lamps operation.



NB-IoT



LoRaWAN®



## ● Headquarters & Factory

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## ● Distributors network



**Pierangelo Lodolo**  
*Managing Director*



**Alberto Gervasi**  
*Senior Sales Manager*



**Sandro Piccoli**  
*Sales Manager  
and Engineering*



**Barbara Blasutto**  
*Back Office*

## Clampco Sistemi is a brand of calzavara S.p.A.

With more than 50 years of history, **calzavara** combines the creative flair of Italian design and architecture with engineering innovation. The calzavara group takes great pride on its heritage, technology assets and the different skills and brands within it. With care and dedication, as well as undivided attention to competitiveness, the group develops innovative products and services for telecommunications and broadcasting, LED lighting engineering, security and smart solutions.

calzavara S.p.A. brands:



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LIGHTING • ENGINEERING • SOLUTIONS

NEW SMART CITY KEY OBJECTS

