



Presentation

imastec

International Master Technology SL

Simple, efficient

**WE DEVELOP SOLUTIONS
ADAPTED TO EACH
CUSTOMER**

**OUR DIFFERENTIATION IS
OUR TECHNOLOGY AND
SERVICE**

**WE PROMOTE THE
ENERGY GENERATION AND
THE RATIONAL
USE OF ENERGY**



Lighting
Efficiency



Alternative
Energy



Strategic
Consulting

ENERGY AUDITS

INDUSTRIAL LIGHTING

STREET LIGHTING

LED LIGHTING

ACTIVE SOLAR LIGHTING

APPLIED TO
BUILDINGS
INDUSTRY
STREET LIGHTING

OBJETIVES:
IMPROVED EFFICIENCY
ENERGY SAVING
ADAPT EXISTING INSTALLATION TO APPLICABLE
STANDARDS
LOWER LIGHTING CONTAMINATION
LOWER EMISSIONS
LIGHT LEVEL AS REQUIRED

SCOPE OF WORK
DATA COLLECTION
ENERGY AUDIT
STUDY THE STANDARDS COMPLIANCE
PROPOSAL INCLUDING:
INVESTMENT COSTS
SAVINGS
RETURN OF INVEST
TIR
APPLICATION OF IDAE AND CEI RECOMMENDATIONS

**COMPLETE SYSTEM
LUMINARIES WITH ELECTRONIC BALLASTS
POINT TO POINT COMMUNICATION
VIA RADIOFREQUENCY**

POWER RANGE: 250-2.000 W

SAVINGS: FROM 25% TO 70%

VERY GOOD LIGHT STABILITY ALLOWS USING LOWER POWER

POINT TO POINT CONTROL WITHOUT CABLING

DIMMING ABILITY: 100-50% CONTINUOUS

EASY INSTALLATION

SHORT RETURN OF INVEST

TURNKEY SOLUTION



**SOLUTIONS BASED ON
ELECTRONIC BALLASTS
FOR HID LAMPS**

- POWER RANGE: 50-250 w**
- LOW FREQUENCY SQUARE WAVE TECHNOLOGY**
- ABLE TO MANAGE ANY TYPE OF HID LAMP**
- VERY GOOD EFFICIENCY: 95% CONSTANT**
- THREE DIFFERENT CONTROL SYSTEMS**
- ABILITY FOR POINT TO POINT CONTROL**
- DIMMING ABILITY:**
 - 100-50% METAL HALIDE**
 - 100-30% VAPOR SODIUM**
- ABLE TO INTEGRATE CONTROL SYSTEM INTO SCADA**

CONTROL SYSTEMS

MIDNIGHT

- Autonomous equipment
- No control cabling required
- Up to 10 lighting levels
- Very easy reprogramming (cabinet or control room)
- Without maintenance

PLC

- Point to point Control
- It uses power lines for communications
- No control cabling is required
- Very simple installation
- Digital signal
- No maintenance

DALI

- DALI Protocol
- Requires 2 cables for control
- Point to point control
- Simple and versatile design
- It allows to turn on and off the whole system or part of it without relays

LED LUMINARY FOR FALSE CEILING



LED LIGHTPIPE LUMINARY

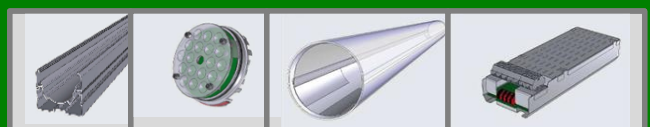
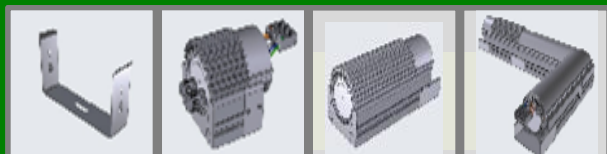


LED STANDALONE LUMINARY



UNIQUE ADVANTAGES OF OUR LED LUMINARIES

1	No maintenace is required
2	Completely wired. Cabling free of halogen
3	Anti-vandal. Protection IP65
4	Very good light uniformity
5	Emergency lighting integrated (power supply not included)
6	Very low glare values
7	Dimming: from 100% to 5% continuous
8	DALI Point to point communication system
9	Easy and quick installation (Plug & Play)
10	Cradle to Cradle concept compliance
11	Extremely long life (more than 16 years)
12	The units are supplied including supports

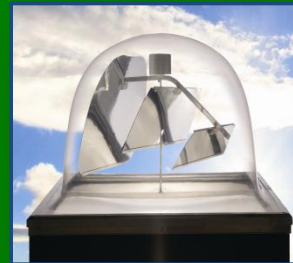


GENERAL CHARACTERISTICS OF OUR LED LUMINARIES

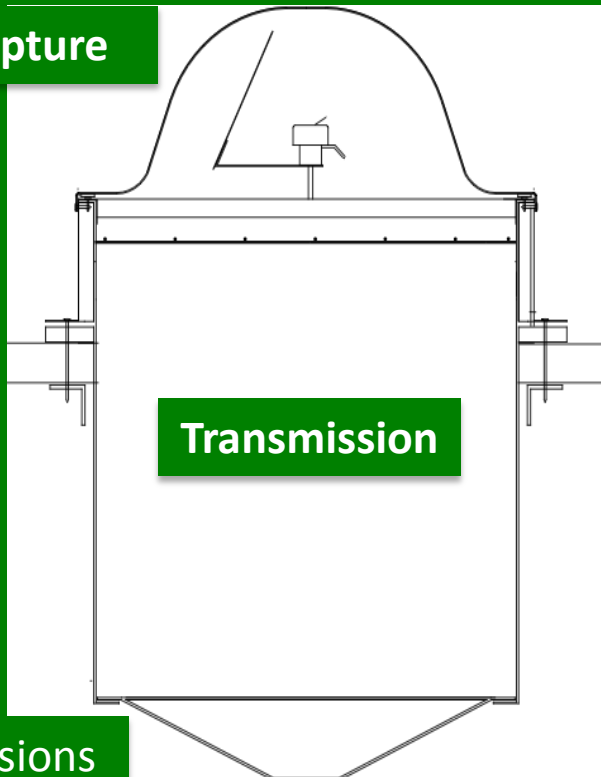
Case	
Material	Aluminum or Painted Steel (depends on type)
Dimensions	600 x 600 mm or 1.200 x 300 mm (false ceiling) 2, 4 o r6 m (Standalone and Lightpipe)
Color	White or Aluminum
Luminary	To be integrated in false ceiling or To be used in low bay applications i.e. parking areas
Lamp	
Light Source	Power LED NICHIA 2x18 or 4x18
Color Temperature	4600K (400-5500K Optional)
Ra	>70 Standard 70-92 Optional
Driver	
Voltage	230 VAC (Nominal)
Power Consumption	39 w or 77 w
Power Factor	0,98
Harmonics	EN61000-3-2 Class C
Life	>100.000 h
Dimming	100%-5% Continuous
Efficiency	>90% (Luminary)
Tubo de Luz	
Material	Polycarbonate 100x96 mm

SOLAR LIGHTING WITH TRACKING

How it works?



Capture



Diffusions

The Active Solar Lighting uses one solar tracker based on GPS technology. This tracker moves one or three mirrors to follow the sun position. This capture part is located inside a transparent dome on the roof. With this system we are able to capture a big amount of sunlight to put it inside the building. A diffuser in lower part produce the diffuse light to elude glaring.

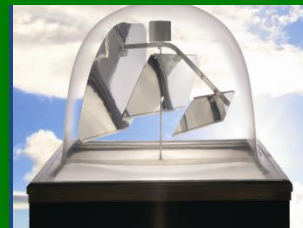
The system is completely autonomous because the power supply for the motor system is supplied by a PV panel.

The whole system has two thermal barriers . The system is able to supply the light equivalent to one 800 w halogen lamp without the associated heat.



**Natural Light ON!
Electrical Light OFF!
10.5 Hours a Day!**

SOLAR LIGHTING WITH TRACKING



ADVANTAGES

More light during daylight time

It allows to turn off the electrical light a big number of hours a day

Very high lumens level with homogeneous distribution

No associated heat

Better color rendering without blinking

More productive working environment

Lower absenteeism

Better performance for the students

Higher sales

Lower operation costs

Potential reduction in taxes

Healthy light plenty, natural and FOR FREE!

**10 YEARS
WARRANTY**

ALTERNATIVE ENERGY

Turn key projects of PV Plants on the roof.

Isolated or connected to the grid systems.

Special applications with different types of panels and inverters.

Thin film panels with very easy installation systems.

We develop not only technical calculations but all financial calculations required to guarantee the total investment, ROI, TIR, etc.

All administrative transactions.

CONSULTING

Strategic consulting in Energy sector

Both in Power Generation and Efficiency

Trade name and Products positioning

Business plans development and follow up

Marketing and commercial plans including market segmentation, human and technical resources, action plans, corrective actions, follow up, etc.

Market development in USA and Europe

Industrial Intelligence

Training course in Energy Efficiency adapted to each Customer

Interim Management

Additional Information:

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