

# PROFESSIONAL HANDLAMPS



luznor



Luznor Desarrollos Electrónicos, S. L., is a company specialized in the design and manufacturing of electronic security devices since its establishment in Vitoria-Gasteiz (Álava) in the year 1998.

## **QUALITY**

The certificate of the ISO 9001:2015 Quality Management standard since 2003 is a guarantee of the quality of Luznor's products, as well as the deep-rooted philosophy of the company of commitment to customers, offering a technical service highly valued by them.

Of course, all products comply with the applicable European Parliament and Council Directives to comply with Directive 93/68/EEC of CE Marking.

## **RESEARCH, DEVELOPMENT & INNOVATION**

With 20% of the staff dedicated to R&D&i, the company is focused on product/service innovation using emerging technologies and new materials, improving manufacturing processes and always taking into account the sustainability of the resources used.

## **ENVIRONMENT**

The company's commitment to the environment was made clear in 2019 by obtaining the ISO 14001:2015 Environmental Management Certificate.

Likewise, Luznor won the Green Pact Award for Good Environmental Practices in 2019 in its fifth edition in the SME category, awarded by the Vitoria-Gasteiz City Council.

## **POSITIONING**

Luznor's greatest differential value is its capability, thanks to a high level of specialization, to offer customized solutions according to the requirements set forth, ranging from its electronic and mechanical design to its validation through relevant tests and approvals in official laboratories.

Luznor Brand is, thus, synonymous with personalized developments of maximum reliability, positioning itself, with an approximate export rate of 15%, in a market niche with high added value at an international level.

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Data collected in this catalogue are valid from the publication date on, except for typographical errors. Luznor has the faculty of changing them without prior notice. This list of references replaces any others published before.

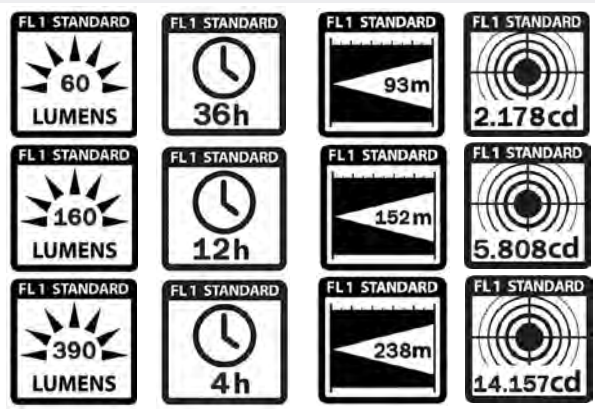


# **SQUARE FORMAT HANDLAMPS**

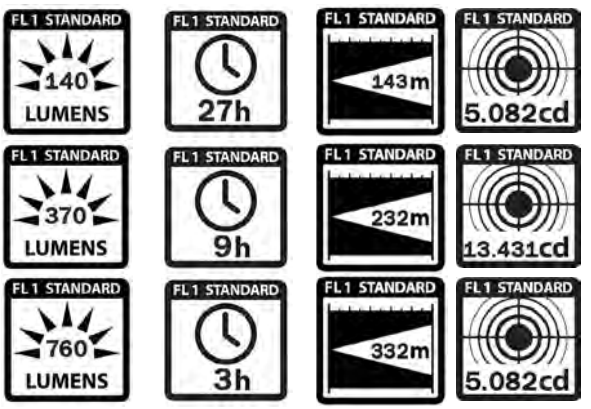




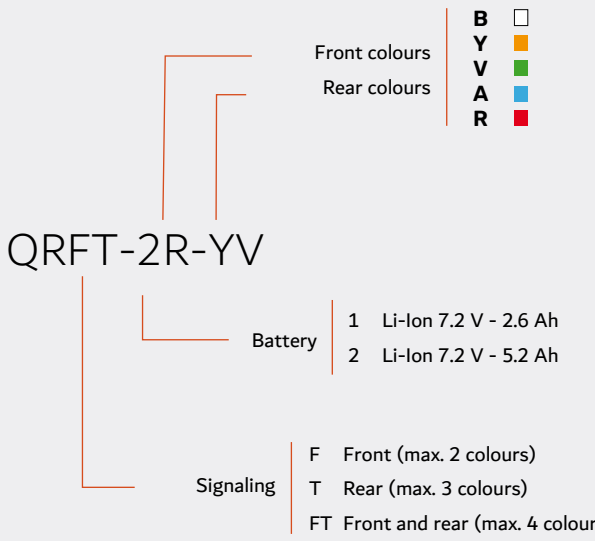
QR-1 lighting characteristics



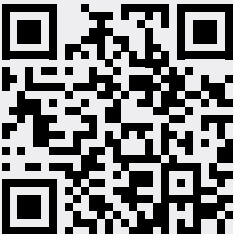
QR-2 lighting characteristics



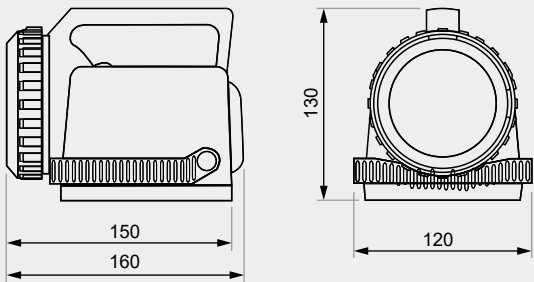
To request different colours, for both front and rear signaling, change the characters that refer to the colour of the leds. Example:



TECHNICAL DATA SHEETS & MODELS



Dimensions



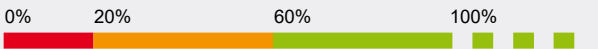
QR QR-1 Y QR-2

Innovation with maximum energy efficiency. Watertight and highly durable led handlamp, with a single high-power white led as the main light source. It features an electronic circuit with microprocessor that allows programmable functions. Front and/of rear signaling. Li-Ion battery compatible with C-64 chargers.



Technical characteristics

◇ Colour temperature	5,000 K
◇ Usage temperature	-10°C ÷ 50°C
◇ Electrical insulation	Clase III
◇ Protection rating	IP67 - IK08
◇ Weight	QR-1 800 g
	QR-2 920 g
◇ Battery	QR-1 Li-Ion 7.2 V - 2.6 Ah
	QR-2 Li-Ion 7.2 V - 5.2 Ah
◇ Light beam	50% a ± 4,1°
	10% a ± 6,9°
◇ Light orientation	Mobile support
◇ Housing colours	Black, red, yellow, blue
◇ Visual monitoring of the charging status:	

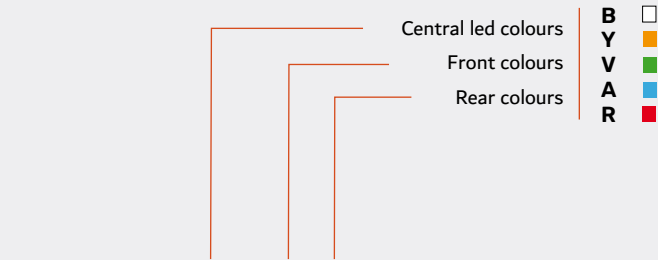


QR-3 lighting characteristics

FL 1 STANDARD 40 LUMENS	FL 1 STANDARD 36h	FL 1 STANDARD 59m	FL 1 STANDARD 876cd
FL 1 STANDARD 100 LUMENS	FL 1 STANDARD 12h	FL 1 STANDARD 94m	FL 1 STANDARD 2.190cd
FL 1 STANDARD 220 LUMENS	FL 1 STANDARD 4h	FL 1 STANDARD 139m	FL 1 STANDARD 4.818cd



To request different colours, for both the central led and signaling leds, change the characters that refer to the colour of the leds. Example:

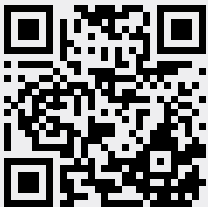


QRFT-3BRYV-B-A

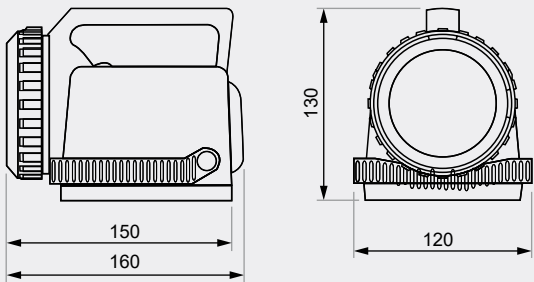
Signaling

- F Front (max. 2 colours)
- T Rear (max. 3 colours)
- FT Front and rear (max. 4 colours)

TECHNICAL  
DATA SHEETS  
& MODELS



Dimensions



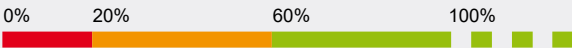
QR QR-3

Innovation with maximum energy efficiency for the signaling sector. Led handlamp (high-power RGBW), watertight and highly durable. It incorporates an electronic circuit with microprocessor that allows programmable functions. Front and/or rear signaling. Li-Ion battery compatible with C-64 chargers.



Technical characteristics

- Usage temperature -10°C ÷ 50°C
- Electrical insulation Clase III
- Protection rating IP67 - IK08
- Weight 800 g
- Battery Li-Ion 7.2 V - 2.6 Ah
- Light beam 50% a ± 5.4°  
10% a ± 8.9°
- Light orientation Mobile support
- Housing colours Black, red, yellow, blue
- Visual monitoring of the charging status:





Security begins with the right  
lighting





LR-1 lighting characteristics

FL 1 STANDARD 60 LUMENS	FL 1 STANDARD 24h	FL 1 STANDARD 93m	FL 1 STANDARD 2.178cd
FL 1 STANDARD 160 LUMENS	FL 1 STANDARD 8h	FL 1 STANDARD 152m	FL 1 STANDARD 5.808cd
FL 1 STANDARD 390 LUMENS	FL 1 STANDARD 2,5h	FL 1 STANDARD 238m	FL 1 STANDARD 14.157cd

To request differents colours, for both the central led and signaling leds, change the characters that refer to the colour of the leds. Example:

Front colours	B	White
Rear colours	Y	Yellow
	V	Orange
	A	Blue
	R	Red

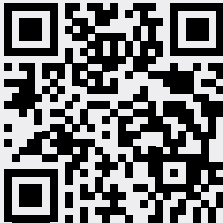
LRFT-1RA-RYV

Battery	1 Ni-Cd (HT) 6 V - 1.6 Ah
	2 Ni-Cd (HT) 6 V - 4 Ah
Signaling	F Front (max. 2 colours)
	T Rear (max. 3 colours)
	FT Front and rear (max. 4 colours)

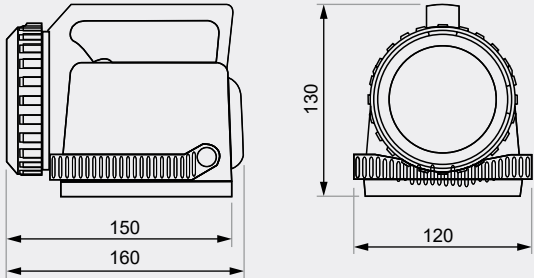
LR-2 lighting characteristics

FL 1 STANDARD 140 LUMENS	FL 1 STANDARD 24h	FL 1 STANDARD 143m	FL 1 STANDARD 5.082cd
FL 1 STANDARD 370 LUMENS	FL 1 STANDARD 8h	FL 1 STANDARD 232m	FL 1 STANDARD 13.431cd
FL 1 STANDARD 760 LUMENS	FL 1 STANDARD 2,5h	FL 1 STANDARD 332m	FL 1 STANDARD 27.588cd

TECHNICAL  
DATA SHEETS  
& MODELS



Dimensions



LR LR-1 Y LR-2

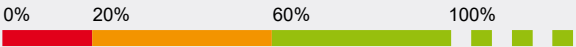
Innovation of the highest efficiency. Professional handlamp (railway, industrial, etc.), watertight and highly durable with a single high-power white led as main light source. It features an electronic circuit with microprocessor that allows programmable functions. Front and/or rear signaling.



Technical characteristics

◇ Colour temperature	5,000 K
◇ Usage temperature	-10°C ÷ 50°C
◇ Electrical insulation	Clase III
◇ Protection rating	IP67 - IK08
◇ Weight	LR-1 950 g
	LR-2 1.320 g
◇ Battery	LR-1 Ni-Cd (HT) 6 V - 1.6 Ah
	LR-2 Ni-Cd (HT) 6 V - 4 Ah
◇ Light beam	50% a ± 4.1°
	10% a ± 6.9°
◇ Light orientation	Mobile support
◇ Housing colours	Black, red, yellow, blue

◇ Visual monitoring of the charging status:





LR-3 lighting characteristics

FL 1 STANDARD 40 LUMENS	FL 1 STANDARD 24h	FL 1 STANDARD 59m	FL 1 STANDARD 876cd
FL 1 STANDARD 100 LUMENS	FL 1 STANDARD 8h	FL 1 STANDARD 94m	FL 1 STANDARD 2.190cd
FL 1 STANDARD 220 LUMENS	FL 1 STANDARD 2,5h	FL 1 STANDARD 139m	FL 1 STANDARD 4.818cd



To request differents colours, for both the central led and signaling leds, change the characters that refer to the colour of the leds. Example:

Central led colours

Front colours

Rear colours

B  
Y  
V  
A  
R

□  
■  
■  
■  
■

LRFT-3BRYV-B-A

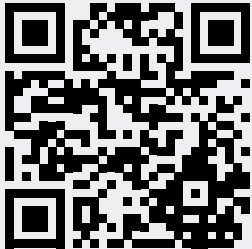
Signaling

F Front (max. 2 colours)

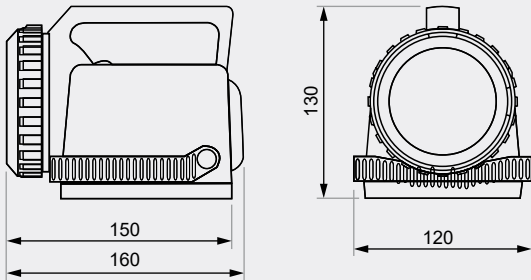
T Rear (max. 3 colours)

FT Front and rear (max. 4 colours)

TECHNICAL  
DATA SHEETS  
& MODELS



Dimensions



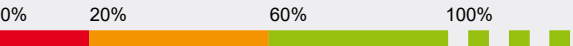
LR LR-3

Innovation for the signaling sector. Professional watertight and highly durable handlamp with a single RGBW high-power led (any light colour) as the main light source. It features an electronic circuit with microprocessor that allows programmable functions. Front and/or rear signaling.



Technical characteristics

- Usage temperature -10°C ÷ 50°C
- Electrical insulation Clase III
- Protection rating IP67 - IK08
- Weight 950 g
- Battery Ni-Cd (HT) 6 V - 1,6 Ah
- Light beam 50% a ± 5,4°  
10% a ± 8,9°
- Light orientation Mobile support
- Housing colours Black, red, yellow, blue
- Visual monitoring of the charging status:





# LED SERIES **Functions**

## Right push button

Controls the signaling functions (front and/or rear), going through all the requested colours, either fixed or flashing.  
In the QR-3/LR-3 handlamp, it also controls the central led: being RGBW, the handlamp can shine in any colour in a very powerful way and perform all the power and flashing modes in the desired colour.

Fixed signal:  
\_\_\_\_\_

Flashing signal:  
- - - - -

## Left push button

Controls the central led.  
Through short and long presses , the different power and/or flashing modes of the handlamps can be selected.

Standard power modes:  
low      high      nominal  
\_\_\_\_\_

Standard flashing modes:  
light bursts  
■■■■■ ■■■■■ ■■■■■  
normal flashing  
- - - - -  
S.O.S. signal  
- - - ■■■ - - -

**Automatic switch off:** the handlamp switches off when placed on the charger.  
**Automatic switch on:** if the charger loses power, the handlamp switches on for 3 minutes.  
**Without signaling:** 1 push button (left). With signaling: 2 push buttons.





FRONT DETAILS



REAR DETAILS





When visibility matters,  
trust professional solutions





Led indicator in charger

The charger also incorporates a led indicator, whose function is to indicate the correct connection of the charger the mains and the charging process of the handlamp, when it is placed on it.



- Slow charger**
- Connected to the mains
  - Handlamp charging (slow) and maintenance charge
- Fast charger**
- Connected to the mains
  - Handlamp charging (fast)
  - Maintenance charge

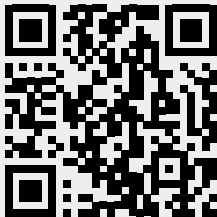
Led indicator in handlamp

The charging status of the battery of the handlamp is indicated through a led indicator. The handlamp must be left on the charger to keep it completely charged for an indefinite time with no harm to its battery.

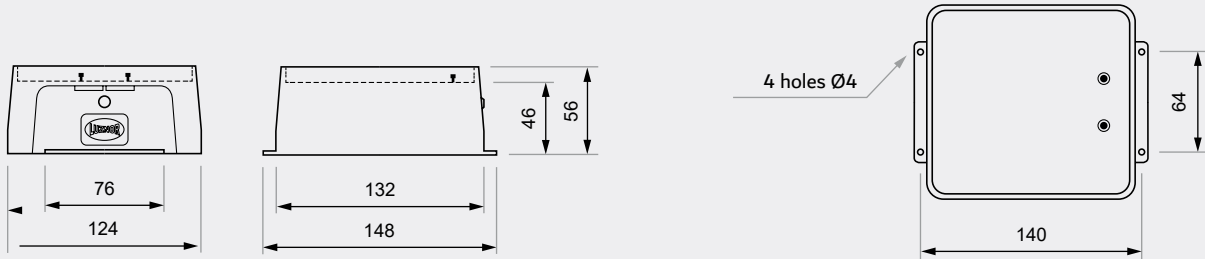


- 0% ÷ 20%
- 20% ÷ 60%
- 60% ÷ 100%
- > 100%

TECHNICAL  
DATA SHEETS  
& MODELS



Dimensions



C-64

Chargers compatible with QR, LR, HR, LRX and HRX series, capable to optimally charge different types of batteries. The charger receives the handlamps and charges its battery by means of two flying contact leads that supply a constant current without electrical hazard. Individual or multiple chargers (for 5 torches).



Standard individual charger



Single charger  
with mechanical fastening



Multiple charger for 5 handlamps

Charging time

battery	slow (h)	fast (h)
Ni-Cd of 1.6 Ah	36	4
Ni-MH of 2 Ah	36	5
Ni-Cd / Ni-MH of 4 Ah	36	8
Li-Ion of 2.6 Ah	24	5
Li-Ion of 5.2 Ah	48	9



To request mechanical fastening, both for individual and multiple chargers, add “E” to the reference.  
Example:

C-64UE

Mechanical fastening



Shoulder strap  
Ref. CHR-1

Fixed mounting in vehicle or on wall (both on a horizontal and vertical surface): the charger has two wings with holes for anchoring with screws.  
To achieve a totally immobile installation, it is necessary that the charger incorporates the mechanical fastening option: it is an additional part that prevents the handlamps from uncoupling, ensuring its correct charging.



The usage temperature of the chargers ranges from -10°C to 40°C. Outside this range, the correct charge of the handlamps cannot be guaranteed.  
Watertight versions of some chargers are available.  
Different types of plugs can be supplied.

DETAILS

Mechanical fastening



Contact points



Load indicator light



Anchor holes





This handlamp complies with the EN 45545-2:2020 railway fire certification. EN 45545-2:2020 is the European standard that regulates the fire behavior of materials and components used in railway vehicles.

It serves to ensure fire safety on trains, limiting the spread of flames, smoke, and toxic gases according to the level of risk of each application.



This series differs from the others in that it features flame-retardant exterior materials.

To order this series, add the letter “F” to the QR and LR series. Example:

FLRFT-1RA-RYV

— Add fire retardant materials





# FC-64

This charger complies with the EN 45545-2:2020 railway fire certification. EN 45545-2:2020 is the European standard that regulates the fire behavior of materials and components used in railway vehicles.

It serves to ensure fire safety on trains, limiting the spread of flames, smoke, and toxic gases according to the level of risk of each application.



This series differs from the others in that it features flame-retardant exterior materials.

To order this series, add the letter “F” to the C-64 series. Example:



FC-64

— Add retardant fire materials

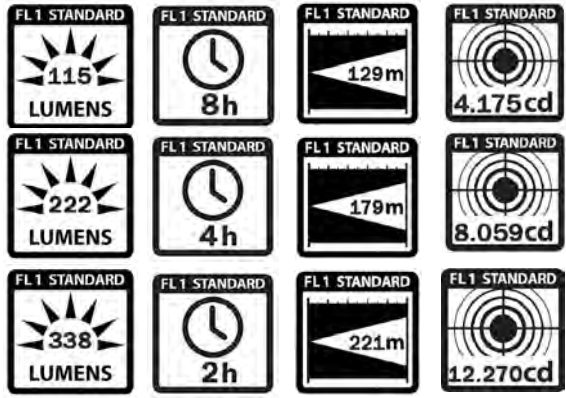


Handlamps designed to withstand  
adverse conditions

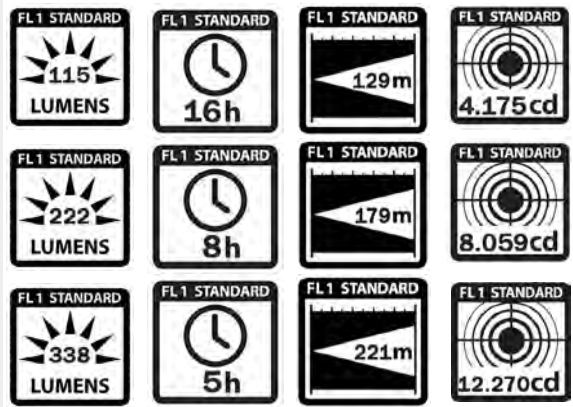




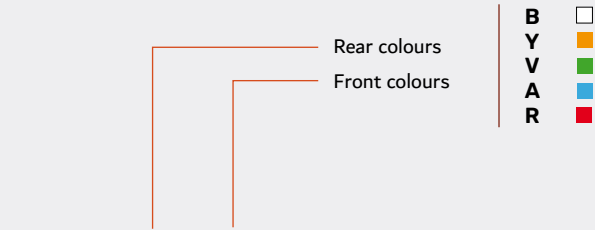
LRX-1 lighting characteristics



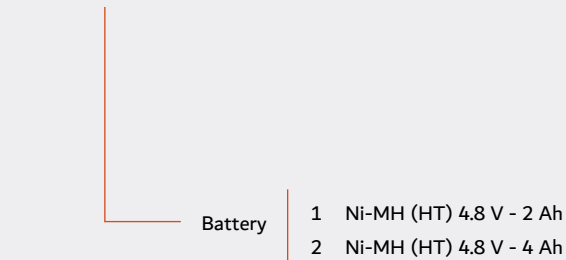
LRX-2 lighting characteristics



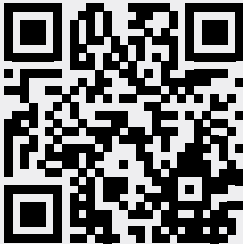
To request different colours, for both the central led and signaling leds, change the characters that refer to the colour of the leds. Example:



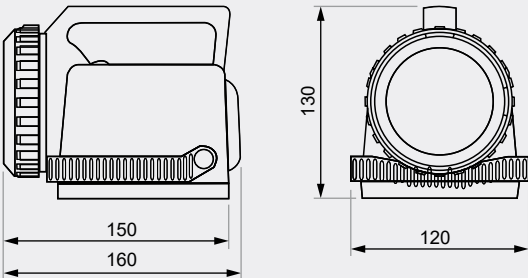
LRX-2RVA-RV



TECHNICAL DATA SHEETS & MODELS



Dimensions



LRX LRX-1 Y LRX-2



Professional handlamp with ATEX certification, to use in explosive atmospheres of zones 0, 1, 2 (gas) and 20, 21, 22 (dust), with high-powered led light source, watertight and highly durable. It incorporates an electronic circuit with microprocessor that allows programmable functions. Front and/or rear signalling.



Technical characteristics

◇ Colour temperature	5,000 K
◇ Usage temperature	-10°C ÷ 40°C
◇ Electrical insulation	Clase III
◇ Protection rating	IP67 - IK08
◇ Weight	LRX-1 1.100 g
	LRX-2 1.350 g
◇ Battery	LRX-1 Ni-MH (HT) 4.8 V - 2 Ah
	LRX-2 Ni-MH (HT) 4.8 V - 4 Ah
◇ Light beam	50% a ± 4.1°
	10% a ± 6.9°
◇ Light orientation	Mobile support
◇ Housing colours	Black, red, yellow, blue

◇ Visual monitoring of the charging status:



ATEX Certification 2014/34/UE

Gas Zone 0  
Dust Zone 20  
Ex II 1 GD  
Ex ia IIC T4 Ga  
Ex ia IIIC T85°C Da  
-40°C ≤ Ta ≤ +40°C  
LOM 15ATEX2183  
CE 0163



# **POLICE FORMAT HANDLAMPS**





QS lighting characteristics



To request different front signaling colours, change the corresponding characters. Example:



Accessories

Translucent cone

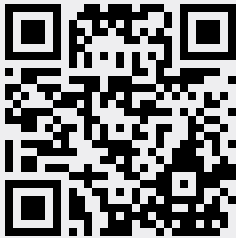
Yellow    White  
Ref. COY    Ref. COB



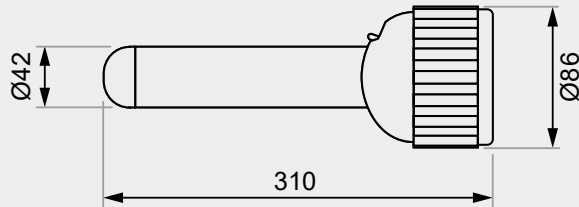
Handlamp tripod  
Ref. TRI-HS



TECHNICAL  
DATA SHEETS  
& MODELS



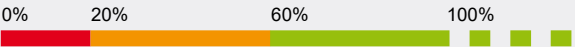
Dimensions



Led handlamp with optimized functions for use by police, traffic control, civil protection forces, etc. Watertight and highly durable with one single high-power led as main light source. It features an electronic circuit with microprocessor that allows programmable functions. Front signaling by means of a led crown.

Technical characteristics

- ◇ Colour temperature      5,000 K
- ◇ Usage temperature      -20°C ÷ 50°C
- ◇ Electrical insulation      Clase III
- ◇ Protection rating      IP68 - IK08
- ◇ Immersion depth      20 m
- ◇ Weight      590 g
- ◇ Battery      Li-Ion 7.2 V - 2.6 Ah
- ◇ Light beam      50% a ± 2.5°  
10% a ± 5.5°
- ◇ Housing colour      Black
- ◇ Visual monitoring of the charging status:





The usage temperature of the chargers ranges from -10°C to 40°C. Outside this range, the correct charging of the handlamps cannot be guaranteed.

Each charger has a pre-installation plate that allows removal with a simple sliding movement.

Watertight versions of some chargers are available.

Different types of plugs can be supplied.

Led indicator in handlamp

The led indicator on the upper part of the head of the handlamp indicates the charging status of the battery. When the handlamp is not being used, it is advisable to leave it on the charger to keep it completely charged, for an indefinite time without harm to its battery.



- 0% ÷ 20%
- 20% ÷ 60%
- 60% ÷ 100%
- > 100%

Led indicator in charger

The charger also incorporates a led indicator, whose function is to indicate the correct connection of the charger to the mains and the charging process of the handlamp, when it is placed on it.



- Slow charger**
- Right Connected to the main
  - Left Handlamp charging and trickle charging
- Fast charger**
- Right Connected to the main
  - Left Handlamp charging fast
  - Maintenance charge

C-73

Chargers for QS handlamps. The charger, with rectangular shape and made of maximum quality technical polymers, receives the handlamp by pressure and charges its Li-Ion battery supplying a constant current with no electrical hazard. Individual or multiple chargers (for five handlamps).

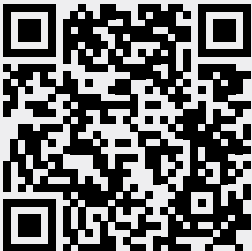


Standard individual charger

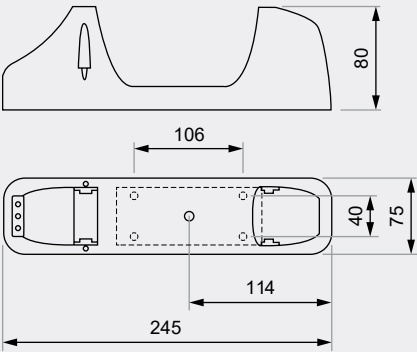


Multiple charger for 5 handlamps

TECHNICAL  
DATA SHEETS  
& MODELS



Dimensions



Charging time

battery	slow (h)	fast (h)
Li-Ion of 2.6 Ah	9	5





## DETAILS

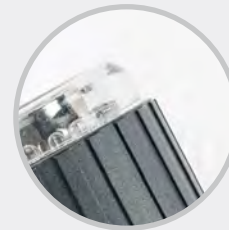
Toggle switches



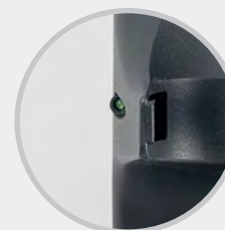
Contact points



Central led /front signaling



Led indicator light



Clip

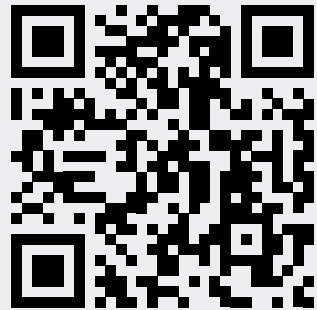


Contact points

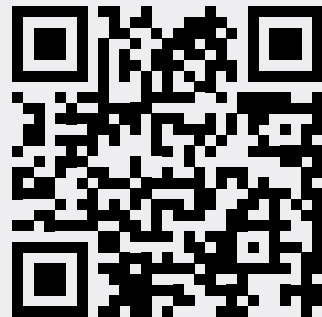




# Instructional videos about how handlamps work



QR and LR HANDLAMPS



QS HANDLAMP





# Sales conditions\*

## OBJECT

The present sales terms are intended to define the commercial relationship between the company Luznor and its customers, which must be mutually beneficial, free and respectful at all times, without exercising dominant or coercive actions.

## ORDERS

Upon receipt of an order, Luznor will send the customer an order acknowledgement indicating the price, delivery time and other specific conditions of the order. The order acknowledgement and the general sales terms will be the only valid contractual documents and will be understood to be accepted by the customer regardless of any other documents that may have been provided.

The delivery time indicated shall refer to the maximum date foreseen for leaving the factory. The delay in delivery, for reasons beyond Luznor's control, shall not be subject to rejection, cancellation or penalty.

The minimum order value is €50 before tax.

## SALES PRICES

The sales prices will be those defined in Luznor's catalogue, those quoted in specific offers or those adjusted to the particular conditions agreed with the customer and always subject to VAT and taxes in force.

## PAYMENT TERMS

According to the law in force 15/2010 of 07 July 2010, from 01 January 2013 the maximum payment term will be 60 days, counting from the date of receipt of the goods.

For orders of less than €300 before tax, payment will be made in advance by bank transfer.

## TRANSPORT

Deliveries involving postage to be paid by the customer will be made through the agency indicated by the

customer or, alternatively, will be charged by Luznor in the invoice. When the delivery is made through the customer's agency, the transport will be at the customer's risk, exempting Luznor from any responsibility.

Upon receipt of the goods, regardless of the method of shipment, the customer must examine them to give their approval. If any incident is noticed due to deterioration, missing numbers or any other reason, a complaint must be made to the agency and simultaneously to Luznor, at the very moment of reception.

Luznor will not accept claims of this kind after 4 days from receipt of the goods.

## RETURNS

Whatever the reason, Luznor will not accept the return of any goods invoiced more than 3 months old.

Prior to returning the material, the customer must inform the factory, at which time Luznor will issue the return authorisation form indicating the corresponding shipping instructions.

In the case of returns accepted by Luznor for crediting, this will be carried out with a minimum depreciation of 20%, as reception, revision and conditioning expenses. Returns of goods considered to be of special manufacture will not be accepted.

## WARRANTY

Luznor products enjoy a 2-year warranty, which covers any manufacturing defects. Fluorescent tubes, halogen lamps, batteries or other components considered consumables are not covered by the warranty.

The warranty is conditional upon proper storage, installation and use of the product by the customer. The warranty excludes faults caused by incorrect installation, improper handling, negligence or external causes.

Products that have been modified or manipulated by non-Luznor personnel will not be covered under

warranty.

## RATES

The values of the recycling rates imposed on each product are not published in this catalogue and will be available on the Luznor website. These rates are only applicable to products sold on Spanish territory.

## PRIVACY POLICY

Personal data will be processed by LUZNOR DESARROLLOS ELECTRÓNICOS, S.L., to maintain contact and communication, manage the contractual and/or commercial relationship with current and/or potential customers and suppliers and, where appropriate, send them information about our activities, products and/or services. This processing is based on: contractual and/or commercial relationship and our legitimate interest. We do not communicate data to third parties, unless legally obliged to do so. You may, where appropriate, exercise the rights recognised by the LOPD, as detailed in the privacy policy of [www.luznor.com](http://www.luznor.com).

## CODE OF CONDUCT

The customer is obliged at all times to comply with the legislation in force. The customer shall not commit, actively or passively, directly or indirectly, any kind of bribery, any violation of the basic fundamental rights of employees, nor shall it employ minors. Furthermore, the customer shall be responsible for the safety and health of its workers. It shall act in compliance with applicable environmental laws and will endeavour to promote this code of conduct among its suppliers and customers.

## JURISDICTION

Any dispute between the parties, regardless of its nature or cause, shall be submitted to the jurisdiction of the courts of Vitoria-Gasteiz, excluding any other jurisdiction.

\* The conditions published in this catalogue may be revised unilaterally by Luznor.



# Applicable regulation

Directives of the European Parliament and of the Council for compliance with Directive 93/68/EEC on CE marking:

- 2014/35/UE      Marketing of electrical equipment designed for use within certain voltage limits.
- 2014/30/UE      Electromagnetic compatibility.
- 2011/65/UE      Restrictions on the use of certain hazardous substances in electrical and electronic equipment.

Other directives of the European Parliament and of the Council:

- 2006/66/CE      Batteries and accumulators and waste batteries and accumulators.
- 2006/25/CE      Minimum health and safety requirements regarding the exposure of workers to risks arising from physical agents (artificial optical radiation).

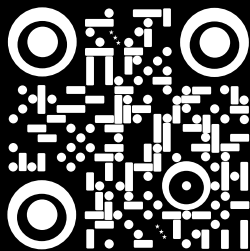
# Railway regulation

EN 50121-3-2: (2016) + A1 (2019)      Electromagnetic compatibility for railway applications – Part 3-2: Emission and immunity requirements for on-board equipment.

EN 45545-2:2020      Fire protection in railway applications – Part 2: fire performance requirements for materials and components.







**luznor**

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