



2014



Welcome to our catalog

Thank you for your interest in Twister-Lights®! With this catalog we proudly present you our product portfolio, pricing and delivery terms.

We encourage you to also visit our website. You will find the latest product news and our brand new Online Shop on www.twister-lights.com.

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- **Portable Guiding Light made of strongest Polycarbonat and Xenoy**
 - **6+ default Light Patterns or customized light pattern of choice**
 - **Rechargeable in 3 hours, run time 20-55 hours**
 - **No faulty buttons but intelligent tilt sensor, fast deployment and storage**
 - **Weather proof, oil and chemical resistant**
 - **6-8 years life time**
 - **Life time guarantee for Polycarbonat transparant cover**

Twister-Lights® 2.0 Sets





Twister-Lights® Sets (2014 Version)



1

Unique design with anti-slip ring preventing the unit from sliding when hit.



2

Smart charging stick attached to car battery or optional DC-adapter.



3

Metal protection unit with charging stick for mounting into vehicles.



4

Industrial Mate-N-Lok connector for heavy use.



5

Polycarbonat transparent cover. Life time guarantee.

About Twister-Lights®

Twister-Lights® is a revolutionary product and a true technological achievement in safety equipment to be used on dark roads, by fog and in smoke conditions to guarantee the safety of the Police, Fire and Rescue teams, Emergency Services, Road Workers and Industrial Users. Twister-Lights® utilizes 20 extremely bright LEDs in either sideway position or up facing position and in six light patterns of choice.

Applications

Police departments, highway patrol, fire brigades, public utilities, chemical refineries, emergency services, road workers, truck drivers, helicopter landing zones (LZ), parachutist/paratrooper training, offshore, car recovery services, armed forces, petrochemical industry, events, warning light for agriculture vehicles.

Benefits

- Twister-Lights® are easy to use: relieve a unit from the wireless charger, turn it upside-down and the unit is switched on automatically. Turn it upside-down again to switch it off. No buttons, no switches.
- Twister-Lights® are resistant to chemical substances, dust, dirt, water, gas and oil spills.
- 6+ Light Patterns or customized pattern on request!
- Recharge in 3 hours, use it for 20-55 hours depending on temperature conditions and active light pattern.
- Heavy duty material made of Polycarbonat and Xenoy (by Sabic).
- Can be installed in vehicle or building using metal protection bracket (included).
- Can be transported easily using travel case with built-in charger.
- Proven life time 6-8 years.
- Life time guarantee on Polycarbonat cover.

Number of Units	pc	4 / 6 / 8
Width	mm	220
Length	mm	220
Height	mm	420 / 330 / 250
Weight	kg	7.0 / 5.5 / 4.0
Battery	V	2.4V
Rechargeable	Y/N	Yes
Operating time	H	20-55
LED Colors	-	Blue, Red, Yellow, Amber White, Green, Infrared
Protection Unit	-	Metal, Grey
Pylon Adapter	-	Optional

Charging your Twister-Lights®

Mounted in vehicle

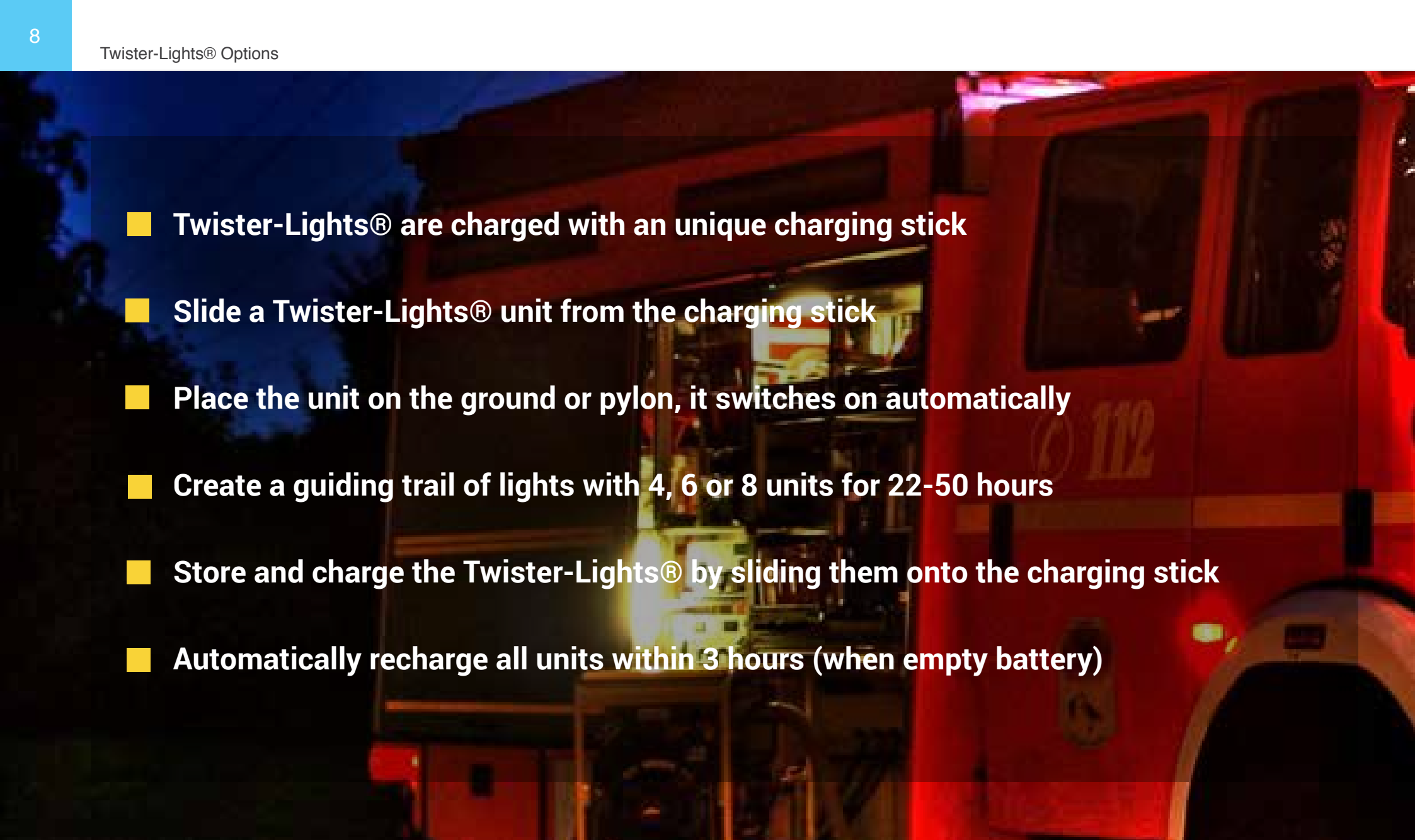
Mount the metal protection unit with charger into the vehicle. Connect the charger using the included wires to the car battery.

Not mounted

Use the optional 220V converter to charge the Twister-Lights® set with a regular 220V-wall outlet at home or office.

Travel Case

Use the Twister-Lights® Travel Case (available in two sizes) and charge the Twister-Lights® units using the 12V car sigaret plug or using an optional 220V converter for the home outlet.

- 
- **Twister-Lights® are charged with an unique charging stick**
 - **Slide a Twister-Lights® unit from the charging stick**
 - **Place the unit on the ground or pylon, it switches on automatically**
 - **Create a guiding trail of lights with 4, 6 or 8 units for 22-50 hours**
 - **Store and charge the Twister-Lights® by sliding them onto the charging stick**
 - **Automatically recharge all units within 3 hours (when empty battery)**



Twister-Lights® Case



The Twister-Lights® carrying case is an industrial lightweight case with built-in charging unit for up to eight Twister-Lights® units. The units are recharged through an included 12V cigarette adapter (150cm), which is connected to the side of the transport case. The trunk can be opened with one hand and there is enough space to take the Twister-Lights® units with gloves quick and easy. The case features a retractable handle on top of the suitcase. The charging unit is secured for overvoltage by means of an auto 8 AMP auto fuse. With the optional in-house charger the units can be charged using a regular 220V-outlet. We offer two sizes, Regular and Large. Regular is for 4 or 6 Twister-Lights®. Large is for 6 or 8 Twister-Lights®.

The size for the Regular model is H210 x W 396 x D 296 mm and for Large H 315 x W 396 x D 296 mm.

* Cases are sold make-to-order. Please respect a delivery time of 7-9 days.



Number of Units	pc	4 / 6 / 8
Width	mm	396
Lenght	mm	296
Height	mm	210 / 315
Weight	g	-
Charge	V	12V/5A
Rechargeable	Y	Yes
Operating time	H	20-55
LED Colors	-	Blue, Red, Yellow, Amber, White, Green, Infrared
Protection Unit	-	N/A
Pylon Adapter	-	Optional

Create your own light pattern!

Twister-Lights® have four light patterns by default. When you order your Twister-Lights® you choose your light pattern. If you do not choose a light pattern, the Twister-Lights® Original effect will be configured by default. You can change the light pattern yourself by removing the transparent cover and selecting another pattern with the pattern-selector on the electronics board. It will remember your pattern. Check the light pattern demonstration video on our website www.twister-lights.com.

Your specific application or local regulations for traffic warning devices possibly require a specific light pattern. For a small fee per unit we can program any light pattern you need. You need exactly 200 flashes per minute? Should the LED's subsequently fade in and fade out? Want to combine two colors of LED's? No problem. Let us know your requirements and consider it done.



Mode	Pattern	Mode	Pattern
1	Twister Original. Running lights with two LED's simultaneously.	5	60 Flashes per minut
2	Full Flash. All LED's flashes simultaneously 240 times per minut.	6	120 Flashes per minut (Offshore Helicopter LZ)
3	Three Burst. All LED's give a short burst of three flashes.	7	Custom
4	Twister 4x5. Running lights with five LED's clustered each time.	8	Custom



Choose your lighting beam direction

By default Twister-Lights® beams horizontally (sideways) with an 30 degrees angle. By means of horizontal lighting, traffic is able to see the beacons from a distance up to 1 km.

You can order Twister-Lights® that beams vertically. If you place Twister-Lights® on the ground it lightens towards the sky with a 30 degrees angle. Combined with optional magnets you are able to attach a Twister-Lights® to a metal object such as vehicles, machinery or fixed metal objects, creating the maximum visibility when one approaches your object. We deliver this option without additional costs. For magnets a small fee applies.



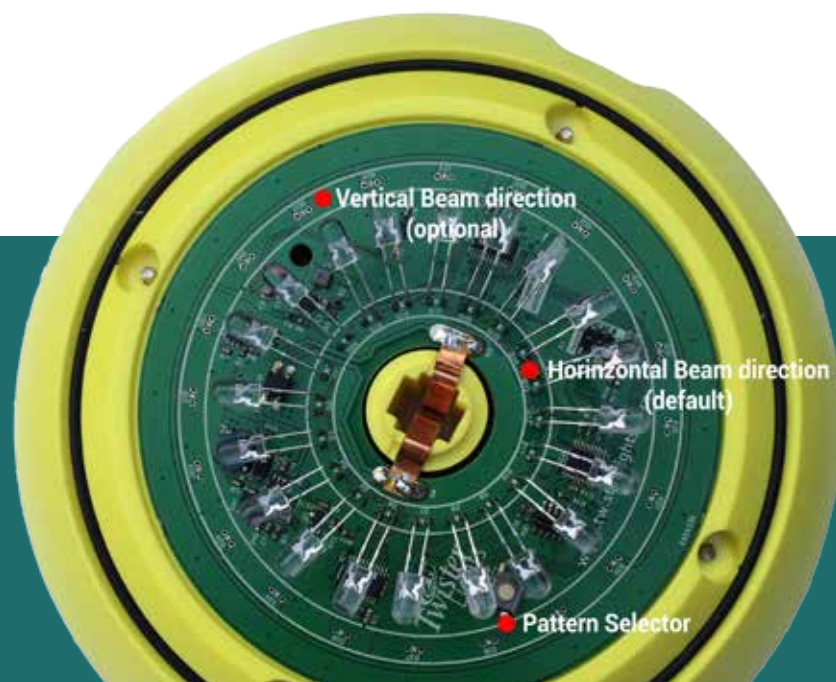
Twister-Lights® with magnets attached to an object i.e. the back of a tractor or industrial equipment.



Twister-Lights® on a flat surface ground with vertical beam to mark an exact location from the air.



Twister-Lights® on a flat surface ground to warn or guide approaching traffic, or guide aircrafts to their landing zone from a far distance.



- 
- **Portable Guiding Light made of strongest Polycarbonat and Xenoy**
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 - **Rechargeable in 3 hours, run time 20-55 hours**
 - **No faulty buttons but programmable tilt sensor, fast deployment and storage**
 - **Weather proof, oil and chemical resistant**
 - **6-8 years life time**
 - **Life time guarantee for Polycarbonat transparant cover**





Battery pack NiMh 4.8V **

Rechargeable Battery pack for Twister-Lights® Units before October 2014. With mini-connector to connect the battery pack to the main board of the Twister-Lights® Unit.

** This battery pack is an improved version of the current battery pack and was introduced early 2014. You may recognize the old version by the black sealing. The improved version has a white sealing. This battery pack does not work with the 2014 version of Twister-Lights®.

Length	mm	30
Width	mm	50
Height	mm	20
Weight	g	114
Voltage	V	4.8
Batteries	pc	4 packed



Battery pack NiMh 2.4V *

Rechargeable Battery pack for the new Twister-Lights® Units version 2014. With mini-connector to connect the battery pack to the main board of the Twister-Lights® Unit.

* This battery pack does not work with Twister-Lights® units before October 2014.

Length	mm	65
Width	mm	14
Height	mm	15
Weight	g	114
Voltage	V	2.4
Batteries	pc	2 packed



Net Adapter 220V to 12V

Home charger for charging multiple Twister-Lights® Units using the Charging Stick that comes with every Twister-Lights® Set. Includes Mate-N-Lok-connector. Use this transformer for Twister-Lights® Sets that are not mounted into a vehicle.

Length	mm	130
Width	mm	60
Height	mm	30
Weight	g	300
Voltage	V	12V/5A
Connector	-	Mate-N-Lok



Net Adapter 220V to 12V Case

Home charger suitable for charging a Twister-Lights® Case. Contains a female car cigarette plug connector, to be attached to the male cigarette plug that comes with each Twister-Lights® Case.

Length	mm	70
Width	mm	30
Height	mm	30
Weight	g	130
Voltage	V	12
Connector	-	2.1mm male



Ground Pen

Combined with 4 drill holes in the Twister-Lights® body you can use the steel pens to firmly mount the Twister-Lights® unit in the ground when used as i.e. Helicopter Landing zone beacon.

Length	mm	160
Width	mm	5

Charging Stick

Replacement charging stick for Twister-Lights® Sets. Comes with Mate-N-Lok-connector for connection with the car battery. Includes protection fuse. Charging Stick fits seamlessly in the metal protection unit.

Order a spare charging stick and home charger if you need to recharge a vehicle mounted set at home or the office.



Length	mm	170
Width	mm	170
Height (4,6,8)	mm	260,330,420
Weight	g	260
Voltage	V	12
Connector	-	Mate-N-Lok



Pylon Adapter

Grey painted metal adapter to attach a Twister-Lights® Unit onto a pylon to create better visibility by placing the Twister-Lights® higher from the ground.

Length	mm	78
Width	mm	84
Height	mm	75
Weight	g	290
Material	-	Metal
Color	-	Dark grey

Transparent Cover

Polycarbonat cover including screws and o-rings. Although Twister-Lights® are made of the extremely strong materials for extreme conditions, you may need to replace the transparent cover if it gets damaged in any way.



Length	mm	170
Width	mm	170
Height	mm	20
Weight	g	100
Color	-	Transparent



About Twister-Lights®



Beam direction
(optional)

Horizontal Beam direction
(default)

Pattern Selector

The Anatomy of Twister-Lights®

There are many LED Flares out there. But there is only one Twister-Lights®. Although the principle seems quite simple, there is a lot of time invested in selecting the right industrial materials to create the ultimate guiding and warning device.

Twister-Lights® are manufactured in Tilburg, The Netherlands. Each unit is carefully assembled and tested by hand by our dedicated engineers.

LED

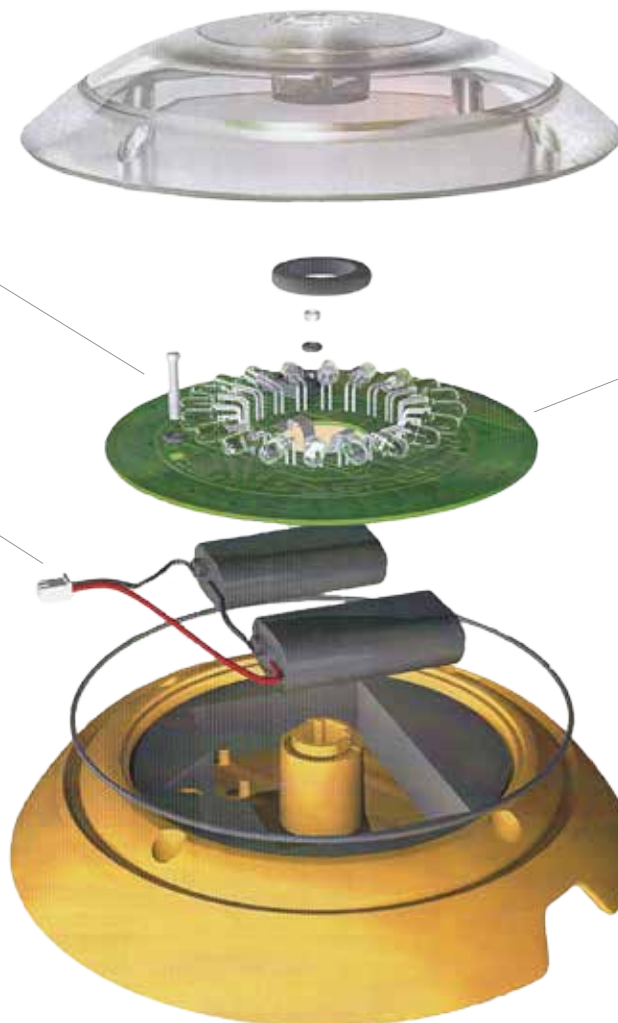
Twister-Lights® uses 20 bright LED's with a 30 degrees angle that beam either sideways/ horizontal (default) or skyfacing/vertical (optional).

BATTERY

Battery pack containing 2x1 shielded batteries total 2.4V. The battery pack is connected to the main board with a connector for easy replacement when necessary.

CERTIFIED

- EN 61000-6-4 (2001).
- EN 61000-3-2 (1995) + A1 (1998) + A2 (1998).
- EN 61000-3-3 (1995).
- EN 61000-6-2 (2001).
- ISO 4582 Protection against ultraviolet lighting.
- EN 12352 Traffic control equipment.



COVER

Hard transparent cover made of Polycarbonat that is able to last significant amount of pressure. The angle of the cover provides optimal visibility of the LED's. Four screws attach the cover firmly to the base unit.

BOARD

SMD main board with twenty LED's. The LED's are toggled sequentially, creating highly visible light effects. Customer can choose between four lights patterns or order customized light patterns that meets his requirements. In the center of the board two aluminium strips for charging the unit with the charging stick. Board contains a programmable tilt-sensor that switches on/off the unit when turning it upside down.

BODY

Hard plastic body made of Xenoy with rubber ring protecting the electronics against water, dust, dirt and corosive chemicals. Inside a filling that firmly hold the rechargeable battery pack. The body has no sharp edges in order to remain in place in the event of a collision with high speed traffic. Body can be extended with strong magnets in order to mounting the Twister-Lights® easily on metal objects.

Four solid reasons to choose Twister-Lights®

There are many reasons why Twister-Lights® is the best choice for professionals:

QUALITY

Twister-Lights® are designed and made for professional usage. Our products are made from excellent materials, to be used in extreme circumstances. We assemble and test each Twister-Lights® manually before shipment. **Lifecycle at least 6-8 years!**

SIZE

It's not hard not make safety light products smaller and smaller. Plenty of those around. We created a product that lies firmly on every ground surface. That doesn't roll or floats away when you accidentally drop it. That doesn't get lost easily in the back of your vehicle or in snow. That is shaped without edges.

EASE OF USE

Ever tried to operating an electronic device with small buttons wearing gloves? When its freezing outside? When its raining cats and dogs?

Switching on a Twister-Lights® is easy: turn it upside down and it works. Turn it again and its off. That's all. Put them back on the charger when finished using.

You order Twister-Lights® with a preselected light pattern of choice. You can change the pattern by opening the body and select another pattern on the electronics board.

ENDURANCE

Running on a 2.4V rechargeable battery pack, Twister-Lights® run 20-55 hours before you need to charge them again. It takes approximately 3 hours to charge a Twister-Lights® when completely empty. Run time is based on light pattern and conditions.



Choosing your Twister-Lights®



	Set 8	Set 6	Set 4	Unit	Case 6	Case 8
Number of Units	8	6	4	1	6	8
Length	220 mm	220 mm	220 mm	170 mm	296 mm	296 mm
Width	220 mm	220 mm	220 mm	170 mm	396 mm	396 mm
Height	420 mm	330 mm	250 mm	50 mm	210 mm	315 mm
Weight	7 kg	5,5 kg	4 kg	380 gr	5 kg	7 kg
Charging voltage	12V	12V	12V	12V	12V	12V
Rechargeable	✓	✓	✓	✓	✓	✓
Mount in vehicle or building	✓	✓	✓	✓		
Charging Method (12V/5A)	Car battery Home charger (optional)*	Car battery Home charger (optional)*	Car battery Home charger (optional)*	Car battery Home charger (optional)*	Car Cigarette Plug Home charger (optional)*	Car Cigarette Plug Home charger (optional)*
Operating Time (conditional)	20-55 hours	20-55 hours	20-55 hours	20-55 hours	20-55 hours	30-55 hours
Charging Time Empty Battery	3 hours	3 hours	3 hours	3 hours	3 hours	3 hours
Operation	Tilt	Tilt	Tilt	Tilt	Tilt	Tilt
Life time	> 6 years	> 6 years	> 6 years	> 6 years	> 6 years	> 6 years
Available colors	Red, Blue, Amber, Yellow, Green, White, Infrared	Red, Blue, Amber, Yellow, Green, White, Infrared	Red, Blue, Amber, Yellow, Green, White, Infrared	Red, Blue, Amber, Yellow, Green, White, Infrared	Red, Blue, Amber, Yellow, Green, White, Infrared	Red, Blue, Amber, Yellow, Green, White, Infrared
Magnets	Optional	Optional	Optional	Optional	Optional	Optional
Vertical version	Optional	Optional	Optional	Optional	Optional	Optional
Light Patterns	6+	6+	6+	6+	6+	6+

* only applicable if not mounted into vehicle

Twister-Lights® Price List 2014

Product	SKU	Consumer Price	Sales Unit
Twister-Lights® 2.0 Sets			
Twister-Lights® Set 8	TL2-8*-SET	€ 696	Set
Twister-Lights® Set 6	TL2-6*-SET	€ 537	Set
Twister-Lights® Set 4	TL2-4*-SET	€ 377	Set
Twister-Lights® Case 6	TL2-6*-CASE	€ 723	Case
Twister-Lights® Case 8	TL2-8*-CASE	€ 914	Case
Customization options			
Vertical Beam direction	-	FREE	
Magnets	-	€ 15	Unit
Elastic Cord (hanging)	-	€ 12	Unit
Custom Light Effect	-	€ 25	Unit
Ground Pen (steel) with 2 drill holes	TL-GP6	€ 5	Unit
Twister-Lights® 2.0 Single Units			
Twister-Lights® Unit	TL2-1*-UNIT	€ 80	1 piece

Product	SKU	Consumer Price	Sales Unit
Parts & Accessories			
Home Charger for Sets	TL-12V-HOME	€ 79	1 piece
Home Charger for Case	TL-12V-HOME-C	€ 69	1 piece
Charging Stick 4 Units	TL-STICK-4	€ 50	1 piece
Charging Stick 6 Units	TL-STICK-6	€ 50	1 piece
Charging Stick 8 Units	TL-STICK-8	€ 50	1 piece
Battery Pack 1.0 (models < 10/2014)	TL-BATT	€ 76	4 pieces
Battery Pack 2.0 (models > 10/2014)	TL2-BATT	€ 76	4 pieces
Spare Transparent Cover	TL-TPC	€ 40	4 pieces
Slip Ring	TL-SLIP	€ 24	8 pieces
Pylon Adapter	TL-PYL	€ 60	4 pieces
Case 6 w/o Units	TL-6-CASE	€ 176	1 piece
Case 8 w/o Units	TL-8-CASE	€ 235	1 piece

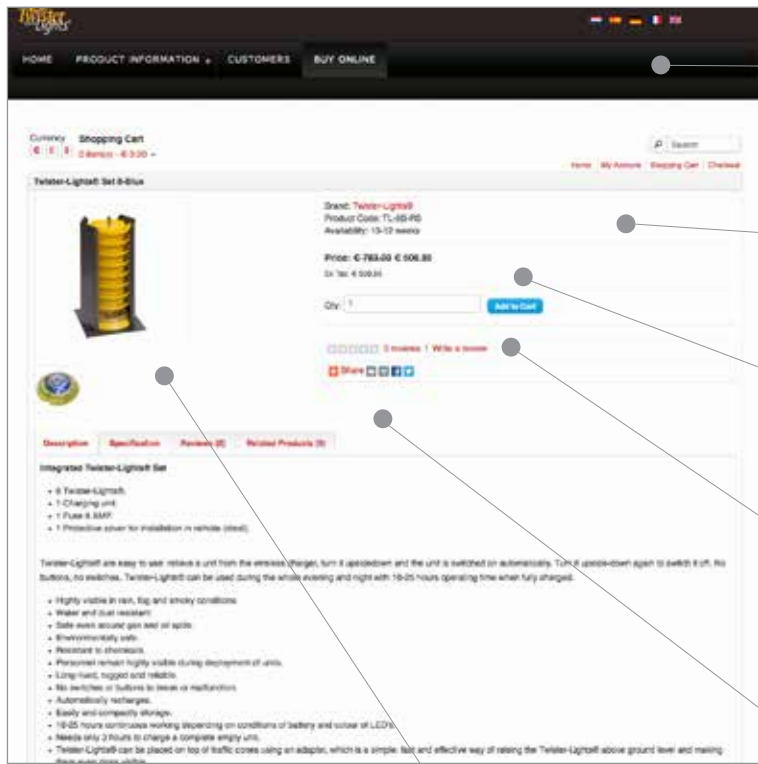
* When ordering replace * with color of LED: (B)lue, (R)ed, (A)mber, (Y)ellow, (G)reen, (W)hite, (I)nfared

** All prices not including 21% VAT. 0% VAT for companies outside the Netherlands with VAT-ID. Free shipping to EU-destinations.

Printing errors may have occurred.

Buy Twister-Lights® Online

We would like to invite you to our Twister-Lights® Online Store. Everything you need to know or buy is on our online store. Create an account on our store and benefit from volume discounts or even fixed discounts from 20 to 35 percent depending on your order history.



LANGUAGE

Shop in your own language: Dutch, English or German.

HISTORY

See your complete order history. Re-order previous orders with just one-click.

YOUR PRICE

The shop will automatically display your price once you are logged on, which may include volume discounts or fixed discount percentages.

SHIPPING

We do not charge shipping fees!

NOTES

Receive email notifications about the status of your order automatically. Includes order acknowledgment, shipping notice and invoice.

CATALOG

Online shop contains all products, product relations, documentation, product photos, specifications, stock levels and (customer specific) prices.

Warranty

What is guaranteed?

That the Twister-Lights® free of charge will be restored, or if necessary replaced, if under normal use according to the instructions within 12 months of the purchase date manufacturing and / or material faults occur. No warranty applies for defects due to wear, or incorrect use.

Who carries out the warranty?

The concern for the execution of the guarantee rests with the merchant that sold you the Twister-Lights® unit(s). Your purchase receipt or invoice is your proof of warranty. You can only invoke warranty on presentation of the invoice. On the invoice should clearly state the date of purchase and the name of the trader. The Twister-Lights® units feature a sticker stating the control date. The warranty is void if this sticker has been removed or defaced.

How to deal with failure?

To avoid unnecessary costs, we recommend that you first accurately read the operating instructions. If the instructions do not help, please contact your dealer.

Return procedure

There are three situations that may occur:

1. DOA (Dead on Arrival)

DOA stands for “Dead On Arrival”. This means that a product is found to be defective upon delivery. Despite all our products are extensively tested before shipping, a system can be damaged or broken during transport. In case of DOA the defective product may be exchanged for a new product or credited. A DOA must be reported within eight working days of the invoice date. Products outside that period are DOA be repaired under warranty. DOA's are only accepted if the product is unused and complete, including all accessories in the original packaging to be returned. Always return of DOA products always (!) our RMA procedure. The costs of returning to OG Optical Guidance BV shall be borne in case of DOA by OG Optical Guidance BV.

2. Defects within the warranty

If a product is within the warranty period, and a technical defect, solely as a result of manufacturing and / or material occurs the product will be replaced. Always use our RMA procedure. The cost of return shipment shall be borne by OG Optical Guidance BV.

3. Defects outside the warranty

If a product is out of warranty and a technical defect occur, the product can be possibly repaired. Before any repair is carried out you will receive a quotation. We always charge € 50.00 euro research costs and any shipping costs for products outside the warranty offered by us. Always use our RMA procedure when returning products. The return costs are at your expense.

RMA

You can request an RMA number via the web shop at www.twister-lights.com. An RMA is valid for ten days. Without RMA-authorization we will not be able to process your return.

About Us



Optical Guidance

Coverall BV introduced a first version of Twister-Lights® around 2003. Today many customers are using Twister-Lights®, including helicopter companies, fire brigades and (traffic) police forces across Europe. They are creating a safe environment for themselves, their environment and the public in situations that requires highly visible guiding lights.

End of 2013, we restructured the company in terms of management, market approach, sales policy and innovation. From January 2014, the Twister-Lights® brand will be continued by a new company and a new management team. Under the name OG Optical Guidance we will build on the success of Twister-Lights® and strive for stable growth in Europe.

Contact

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Optical Guidance