TTS

www.ttsys.eu

Illuminated Signals

| ROADWORKS | VEHICLE | ON-BOARD | PERMANENT |

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The world changes, TTS innovates

Committed for over 30 years to the development of new solutions for safety and signage, we maintain a high level of standards in which innovation plays a key role.
We are able to provide innovative, tried and tested solutions for traffic management, with over 90% added value generated by our worksshops in France.

Rémo CHIAVELLI
Chief Executive Officer

ISO 9001
ISO 14001
BUREAU VERITAS
Certification

BUREAU VERITAS
1828

Made in France

ECOSYSTEM

Environmentally friendly

Setting up system for collection, transport and recycling system for Waste Electrical and Electronic Equipment is a legal obligation (European WEEE Directive) for all producers who place this type of equipment on the market.

A part of our commitment is to be a responsible player and in order to meet this legal obligation, we have registered with Ecosystem as an EEE producer, so that our customers can benefit from a free collection and recycling service for our end-of life products. Catalogue prices exclude Eco Participation. For any information for waste collection points or collecting methods, please visit : www.ecosystem.eco.

Design
Office

Integrated
Welding
Workshop

Digital Graphic
Design
Workshop

Assembly
Workshop

THE DESIGN
BEHIND YOUR SAFETY

The human resources, the means and the technology to ensure your safety

Mechanical Fabrication Unit

Electronics Boards Manufacturing Unit

Digital Machining Centre for Plastic and Metal Sheets.

Commissioning and After-Sales Unit

Our range of optics to suit all configurations...

Optic Ø 300 mm - The large size :

Made up of 225 high light intensity yellow LEDs. Polycarbonate protective lens. Integrated contrast screen (500 x 500 mm / polyester powder coated paint).

Optic Ø 200 mm - High safety :

Made up of 80 high light intensity yellow LEDs. The electronic CPU can be integrated into the optic. Polycarbonate protective lens.

Optic Ø 130 mm - The perfect format :

Made up of 30 high light intensity yellow LEDs. Especially thin designed. Polycarbonate protective lens.

Optic Ø 70 mm - The small systems :

Composed of 30 or 12 high and very high light intensity yellow LEDs. The 30 LED version is cast in a black polymerized polyurethane resin. The 12 LED version is protected by a lens.

NEW

■ *New 2 battery case*
New design
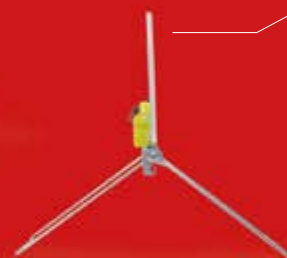
+ *compact*
+ *resistant*

The case profile protects the connectors.

■ *New optic Ø 70 mm for triangle 700*

ultra-thin (12 mm)

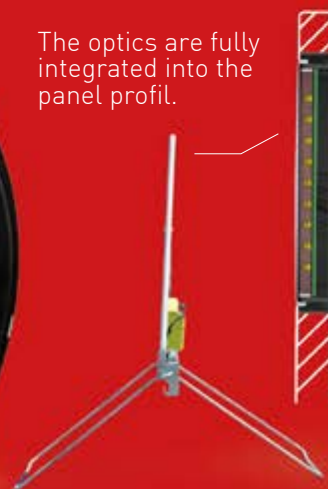The optic is fully integrated into the panel profile.

■ *New optic Ø 130 mm*

ultra-thin (25 mm)

+ *resistante*

The optics are fully integrated into the panel profil.

These products allow optimized loading in the racks of panel trailers, without risk of damage.

Illuminated Signals

ROADWORKS

TRAFFIC LIGHTS *P 8-13*

NEW

ILLUMINATED SIGN EQUIPMENT *P 16-17*

TRAFFIC GUIDANCE *P 18-19*

WORKS ON SITE EQUIPMENTS *P 21*

tempo

THE MARKET
BENCHMARK

CERTIFIÉ PAR ASCQUER

NF

2:53

Waiting time display in **minutes and secondes**

High Autonomy
2 month with a 200 Ah battery.
1 month with a 100 Ah battery.

Easy to program

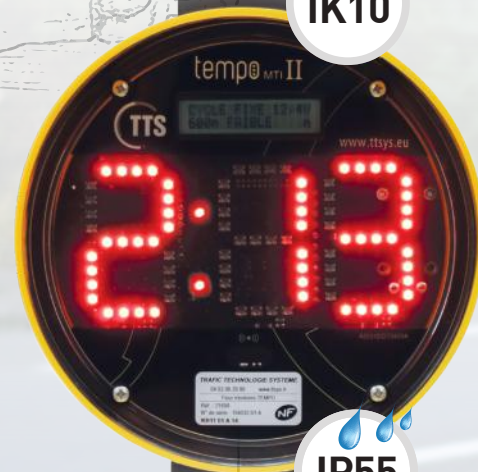**Easy Handling**

Low price and reactivity on the spare parts

Economic
The lowest operating cost on the markett

IK10

IP55

Choice of optional box

TEMPO range : Specialist's expertise result !

tempo STANDARD
page 10

tempo SOLAR
page 12

tempo RÉGULATION
page 13

tempo OPTIONS
page 14-15

Up to **1,5 months** *** of autonomy
(*) with a 200 Ah battery

Up to **1 year** *** of autonomy
(*) with a 200 Ah battery

ATTENTION PIÉTONS
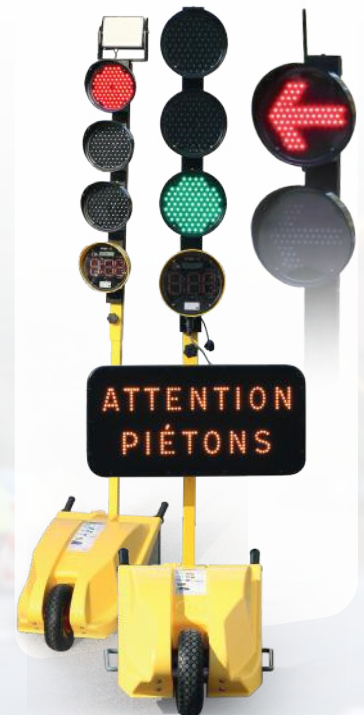
■ Usable on all your sites

7 built-in programmable configurations on standard version.

The key word is flexibility. The Tempo traffic lights standard version can also manage alternating traffic at 3 and 4 branchs junction. It supports the management of cross-cycles and changeover cycles on green.

⇢ **Alternating**

⇢ **3 branchs junction**

⇢ **4 branchs junction**

■ Specific protection solutions

more details page 10

Theft delay arm tube

⇢ **47110**

Protection cage

⇢ **41186**

Tempo Mobile Traffic Light

tempo STANDARD

ASCQUER CERTIFICATION
Admission n° : KR11 01
www.ascquer.fr

Reliability, technology, and unique know how.

The electronics :
• Programming and management interface via infrared link with mobile synchronisation case.
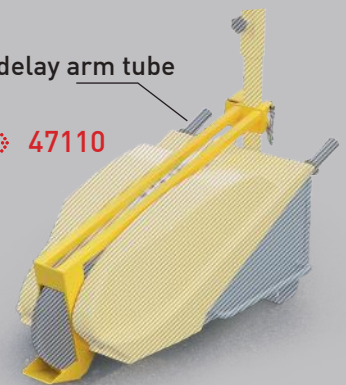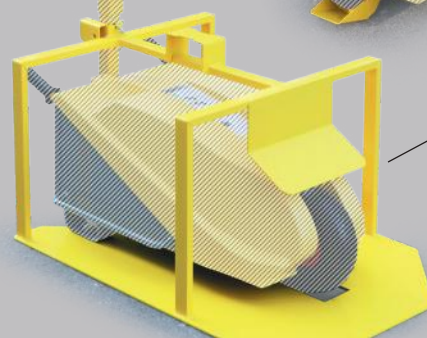• Module and all the optics protected by a polycarbonate face.
• Display on a 2 x 16 character alphanumeric LCD screen of all cycle information, programming, and control information.
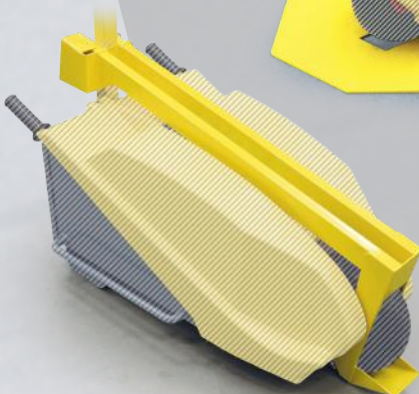• Waiting time display.

The structure :
• Wheelbarrow box with ABS cover.
• Handling handles.
• Telescopic mast : closed 1.55 m, open 2.50 m.

Up to **1,5** *months* of autonomy *

(*) with a 200 Ah battery

⇢ 21698

⇢ 41186

⇢ 47110

Tempo Mobile Traffic Light

21698	Set of 2 Tempo temporary traffic lights with remote control
22563	Single Tempo temporary traffic light (without remote control)

Power Supplies

The range of 100 Ah battery makes **handling easier** while maintaining one month's autonomy.

1992	Rechargeable battery 12 V 100 Ah Plan for one rechargeable battery per light

The range of 200 Ah battery gives the tempo 2 months **autonomy**. Perfectly suited to long term worksites.

376	Rechargeable battery 12 V 200 Ah Plan for one rechargeable battery per light

Battey fixing straps :

9322	Set of 2 straps Two straps per battery are required

Battery charger from 100 Ah to 250 Ah :

21551	Battery charger range 300 W / 12 V

Battery charger from 50 Ah to 100 Ah :

26758	Battery charger range 100 W / 12 V

230 V power supply :

1522	Power supply 230 /12 V Allow for one power supply per light

Protection Accessories

Protection structure for Tempo casing :

41186	Protection structure for Tempo casing (Padlock nnot included)

Theft delay arm tube :

47110	Theft delay arm tube (Padlock nnot included)

Padlock :

12257	Brass padlock

Tempo Mobile Traffic Light & Tempo Solar

3758
Mast cap

3754
Optics suppurt mast

1513
Black dome casing

58465
Red LED electronics

1171
Ø 210 seal

Sent within 48 hours !

3755
Upper mast

1509
Red LED Optic

58475
Yellow LED electronics

886
Polycarbonate lens Ø 210

1510
Yellow LED Optic

58476
Green LED electronics

22561
Complete Tempo module

40929
Tempo electronics

42218
Decorated front face lens

Electrical Components For Connection Box

460
3-pin XLR female base socket

1521
Spiral cable + 3-pin XLR socket

477
Red battery terminal

478
Green battery terminal

3756
Lower mast

1514
Yellow dome casing

Tempo Solar Specific Spare Parts

42359
Solar panel 12 V 20 W

31036
Solar battery holder case 12 V 20 W

22562
Complete Tempo Mast

1120
M10 x 30 Stainless Steel Knob

22558
Tempo remote control

31125
Solar housing cover 12 V 20 W

1164
Tempo Solar wheel

31119
Charge regulator

22377
Battery casing

14334
Plastic sleeve

22383
Casing cover

22372
Painted casing

13524
Casing handle (without sleeve)

Steel Metal Options

43753
OPTIMO battery casing

44429
Casing cover Partial opening before October 2019

49678
Casing cover Total opening from October 2019

From 2018 :

44426
Connection box

Before 2018 :

21753
Connection box

27645
Wheel axle

22832
Left cover tab

27647
Elastic washer with cap

22833
Right cover tab

22385
unpuncturable wheel

27646
Wheel spacer

Solar Tempo Mobile Traffic Lights

Up to
1 year*
of autonomy

(*) with a 200 Ah battery

tempo
SOLAR

eco-efficient

Intertraffic
INNOVATION AWARD

Tempo changes to Green !
Always looking for innovation, we adapt our know-how in photovoltaic energy for the benefit of work site traffic light.

Unrivaled autonomy

The solar panel allows you to increase your battery's autonomy safely and free of charge. So you make a considerable maintenance savings.

The technique :
• The 20 W photovoltaic panel supplies the battery via a charge regulator.
• Photovoltaic module unit protected by polycarbonate.

The structure :
• Painted steel casing.
• Handling handles.
• Telescopic mast.

Reinforced impact protection
with polycarbonate and steel casing.

Solar Tempo Traffic Lights

31175	Set of 2 solar Tempo traffic lights with remote control
30878	Single solar Tempo traffic light (without remote control)

Rechargeable battery

The use of 200 Ah battery provides optimum traffic light ballasting. It also enables available power levels to be smoothed during less sunny periods.

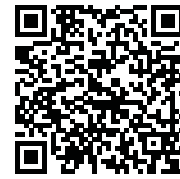| 376	Rechargeable battery 12 V 200 Ah Allow for one rechargeable battery per light

Specific Spare Parts

Tempo solar traffic light spare parts are available on page 11.

Trafic Regulation Tempo Mobile Traffic Light

tempo REGULATION

It automatically regulates traffic
priority to the most congested axis

Discover how
Watch the video

Trafic Regulation Tempo Traffic Lights

35375	Set of 2 Tempo regulation traffic light with remote control
41855	1 Tempo regulation traffic light (without remote control)

Power Supplies

The 100 Ah battery range makes **handing easier** while maintaining good autonomy.

1992	Rechargeable battery 12 V 100 Ah Plan for one rechargeable battery per light

The 200 Ah battery range gives the Tempo Regulation optimum **autonomy** perfectly suited to long term work sites.

376	Rechargeable battery 12 V 200 Ah Plan for one rechargeable battery per light

Battery fixing straps :

9322	Set of 2 fixing straps Two straps per battery are required

Batteries charger from 100 Ah to 250 Ah :

21551	Battery charger range 300 W / 12 V

Batteries charger from 50 Ah to 100 Ah :

26758	Battery charger range 100 W / 12 V

Protection Accessories

Specific protection solutions can be found on page 10.

Easier to program.
Easier to force all lights to red.

Less traffic jams.
Less waiting at red lights.

Less incivility.
Less stress on sites.
Less risk of accident.

CO_2

Less pollution.
Less energy consumed.

Control Options
Radio remote control
Remote control case
Call push button
GSM/SMS

Detections Options
Motion detection radar
Regulation radar
Speed detection radar
Magnetic loop detector

Communications Options
Wireless link
Wired link
Dry contact

Software Development Options
Non-standard cycles
Customized function...

Specific Optics Options
Cross, arrow, repeater, green, white, blue optics...

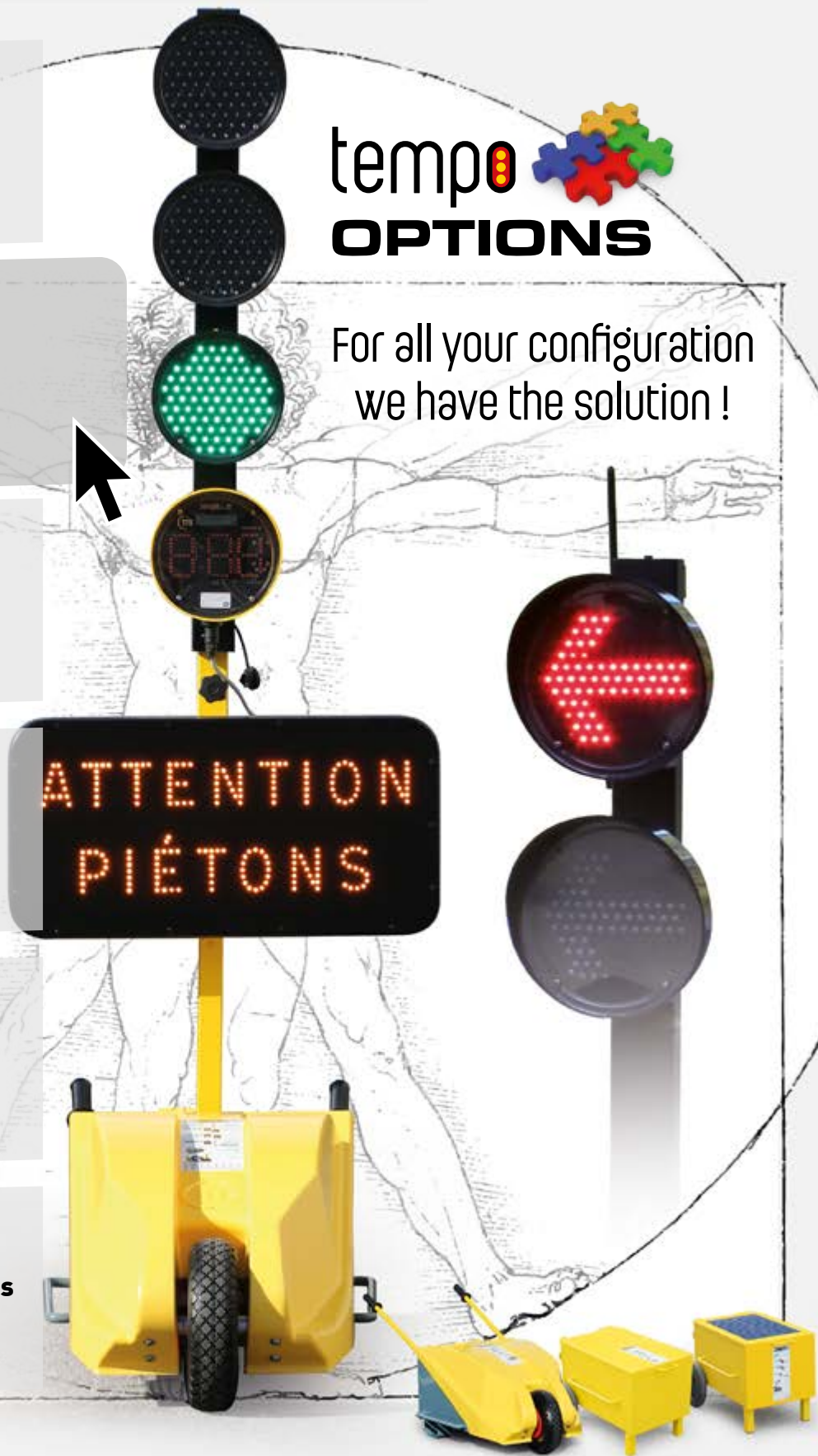## Power Supply Options
Battery, Solar, 230 V, Public Lighting Source

tempo OPTIONS

For all your configuration we have the solution !

ATTENTION PIÉTONS

N°1 on Modularity
Options to match every site configuration.

Contact us

Some examples of specific configurations :

tempo OPTIONS Exit from site priority

Watch the video

tempo OPTIONS Manual remote - controlled alternate Independant

Watch the video

tempo OPTIONS Manual remote - controlled alternate Synchronized

Watch the video

tempo OPTIONS Green traffic light reward

Excessive Speed : the light stays red

Watch the video

NEW

tempo OPTIONS Intermediate arrows traffic light

Inform of the active direction of traffic, **for a trafic light alternate**

STANDARD TRAFFIC LIGHT

CENTRAL LIGHT WITH DIRECTION ARROW

CENTRAL LIGHT WITH DIRECTION ARROW

STANDARD TRAFFIC LIGHT

Watch the video

For 20 years we've been ensuring that our lights meet your specific requirements.
...we have been entrused with carrying out their projects : Atlante construction, Demathieu et Bard, Dodin Campenon, DTP Terrassement, Eiffage TP, Entreprise Girard , GTS Guintoli, Razel Bec, Roessel, SFTRF, Sobeca, Spie Fondations, Vinci Construction Terrassement, Loxam etc...

Illuminated Sign Equipment

NEW

△ **Triangle 700**

Up to **3 months** *of autonomy* *(*) with a 75 Ah battery*

Tri-flash set autonomy * :

Optic	2 Battery Case		4 Battery Case		Battery
	7 Ah	45 Ah	7 Ah	45 Ah	75 Ah
70 mm 30 LEDs	390 h	2 510 h	781 h	5 020 h	4 183 h
70 mm 12 LEDs 130 mm 30 LEDs	207 h	1 329 h	413 h	2 658 h	2 215 h

* 24 hours working with 7 hours of night and at 20°C

Up to **3 months** *of autonomy* *(*) with a 75 Ah battery*

Other symbols : contact us.

△ **Triangle 1000**

Site Light Triangle

Lighting equipment composed of :
3 optics of Ø 130mm/30 LEDs or Ø 70 mm/12 LEDs and a control unit. The length of the optics leads are 1.5 m. Extensions of 5m are possible. Activated by a 3-position waterproof switch (24-hours, off, night).

1000 or 700 mm triangle sign, class 2 symbol of your choice, fitted with an integral stand completely foldable.

Power supply using 2-battery case (type 4R25) :

58800	Triangle 700 Ø 70/12 LEDs - classe 2 2-battery case (batteries not included)
17836	Triangle 1000 Ø 130/30 LEDs - classe 2 2-battery case (batteries not included)

Power supply using rechargeable battery :

60087	Triangle 700 Ø 70/12 LEDs - classe 2 Rechargeable battery (Rechargeable battery not included)
20238	Triangle AK5 1000 Ø 130/30 LEDs - classe 2 Rechargeable battery (Rechargeable battery not included)
49962	Additional sign 700 x 200 - classe 2

4 batteries case option
⇢ **57270**

NEW

Up to **55 days** *of autonomy* *(*) with 2 x 45 Ah batteries*

⇢ **55236**
2 batteries case option

⇢ **15702**

BATTERY

Lighting kit

Power supply using a 2-battery case (type 4R25) :

19601	3 optics Ø 70mm/30 LEDs set 2-battery case (batteries not included)
15702	3 optics Ø 130mm/30 LEDs set 2-battery case (batteries not included)

Rechargeable battery power supply :

19602	3 optics Ø 70mm/30 LEDs set Rechargeable battery (Rechargeable battery not included)
16891	3 optics Ø 130mm/30 LEDs set Rechargeable battery (Rechargeable battery not included)
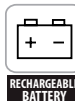
Up to **3 months** *of autonomy* *(*) with a 75 Ah battery*

RECHARGEABLE BATTERY

⇢ **16891**

Options

Universal fixing clamp option : the option includes 3 pre fitted clamps on diameter 130 mm optics.

29815	option 3 clamps for universal mounting.

⇢ **29815**

Jack lead extension :

22279	For optics Ø 70, Ø 130 ou Ø 200 Length : 5 m

⇢ **22279**

Up to 80 days * of autonomy
(*) with 2 x 45 Ah batteries

→ 14004

Up to 1 months * of autonomy
(*) with 2 x 45 Ah batteries

→ 1532
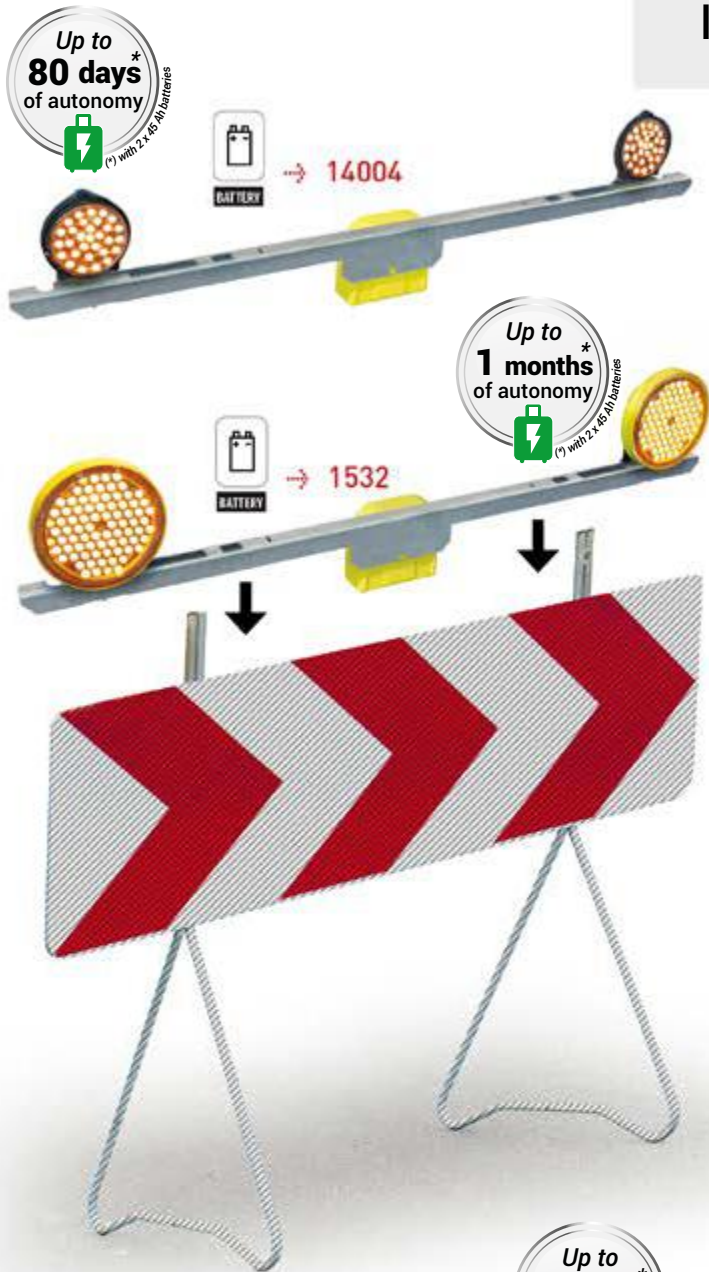
Bi-flash set autonomy * :

Optic	2 Battery Case		4 Battery Case		Battery
	7 Ah	45 Ah	7 Ah	45 Ah	75 Ah
130 mm 30 LEDs	301 h	1 936 h	602 h	3 873 h	3 227 h
200 mm 80 LEDs	119 h	767 h	239 h	1 535 h	1 279 h

* 24 hours operation with 7 hours of night and at 20°C

Pre-Equipped Bar For Panel Signs

Lighting equipment composed of 2 LED optics a control panel. Activated by a 3-position waterproof switch (24-hours, off, night).

Bar length 1500 mm

Power supply using 2-battery case (type 4R25) :

14004	Fast-fit bar bi-flash optic Ø 130-30 2-battery case (batteries not included)
1532	Fast-fit bar bi-flash optic Ø 200-80 2-battery case (batteries not included)

Power supply using rechargeable battery :

57703	Fast-fit bar bi-flash optic Ø 130-30 Rechargeable battery (Rechargeable battery not included)
23659	Fast-fit bar bi-flash optic Ø 200-80 Rechargeable battery (Rechargeable battery not included)

4 battery case option
→ 57270

NEW

Up to 1 months * of autonomy
(*) with 2 x 45 Ah batteries

→ 55236
2 battery case option

→ 16893
BATTERY

Bi-Flash Set For Panel Signs

Lighting equipment composed of 2 LED optics a control panel. Activated by a 3-position waterproof switch (24-hours, off, night).
The length of the optics lead is 1.5 m. Extension option available.

2 battery case power supply (4R25 type) :

26906	bi flash optics Ø 130mm/30 LEDs set 2-battery case (batteries not included)
16893	bi flash optics Ø 200mm/80 LEDs set 2-battery case (batteries not included)

Rechargeable battery power supply:

24856	bi flash optics Ø 130mm/30 LEDs set Rechargeable battery (Rechargeable battery not included)
16894	bi flash optics Ø 200mm/80 LEDs set Rechargeable battery (Rechargeable battery not included)

Up to 53 days * of autonomy
(*) with a 75 Ah battery

RECHARGEABLE BATTERY

→ 16891

Find all the power supplies on pages 22 - 23

BATTERY   RECHARGEABLE BATTERY   230 V   SOLAR   P.L.S

Traffic Guidance

→ **1547**

RECHARGEABLE BATTERY

Up to **19 days** of autonomy *
(*) with a 75 Ah battery

→ **37121**

Scrolling Lighting Bar 5 Optics

Length 1,3 m, with 5 optics Ø 200/80 LEDs.
Scrolling direction (right, left or double flash) is controlled by a switch.
3m power supply cable with XLR plug.

1547	Bar with 5 optics Ø 200/80 LEDs

37121	Clamp option for universal fixing

→ **12018**

→ **1556**

Accessories

XLR extension :

12018	XLR extension - 16 m

Day/night control unit:
Allows night-time only power-up to be achieved.

1556	Day/night control panel

Mobile battery case Option :

45801	Mobile battery case option

Protection cage for mobile battery case :

41186	Protection cage for mobile battery case (Padlock nnot included)

Theft delay arm tube:

47110	Anti-theft arm (Padlock nnot included)

Padlock :

12257	Brass padlock

→ **45801**

→ **41186**

→ **47110**

BATTERY **RECHARGEABLE BATTERY** **230 V** **SOLAR** **P.L.S**

Exclusive :

The scrolling mode is preceded by **a double synchronised flash** on all optics.

This method helps to guide drivers **!**

Up to **10 days** * of autonomy
(*) for 5 optics with a 75 AH battery

RECHARGEABLE BATTERY

⇢ **11400**

⇢ **37192**

Scrolling Ø 200 Optic
with theft-prevention attachment

Auto-synchronizable lamps via wired connections.
Each optic connects behind the previous light. Power on the first fire.
LED optics Ø 200/80 with secondary lens.
Consumption at 12 V in flash mode : 0,06 A.

Operating mode for better security :
Double control of the light source. Synchronous flash of all optics to promote spatial identification of the bend in all its depth.
Superimposed scrolling sequence with drag effect to mark the curve.

Wiring mode :
Supplied with an independent cable equipped with two XLR plugs, length 16 m.
Easy storage and quick implementation.

11400	Optic Ø 200/80 LEDs wired connection
	Anti-theft device

5 optics storage container :

37192	Storage container for 5 optics & cables

Mobile VMS

The Variable Message Panel on a mobile trolley precisely informs and signals the road user. Its flexibility of implementation and its small footprint on the roadway make it possible to adapt to all scenarios. Supplied with its control case and a complete library of messages, it can easily be supplemented with the messages of your choice.

Variable Message Sign specifications:
- 140 mm matrix display, for up to 10 characters.
- Yellow LEDS.
- Polycarbonate UV-resistant protection.
- Standard RAL matte black colored.
- Enclosure fitted with toggle locks.
- Fixing gear included.

Control unit specification:
- Backlighting.
- Direct short keys (auxiliary, triangle, VMS).
- 99 preprogrammed messages.
- Editable text messages with the programming software (included).
- Connection with USB port for message modification.
- Rear ball joint fixing.

VMS general specifications :
- Voltage: 12 V.
- Dimensions: 1210 x 295 x 220 mm.
- Overall height: 1533 mm.

The mast can be detached from the battery compartment for transport means

40099	Site mobile VMS
	H140 matrix, 10 characters

Site Lighting

Light With Optic Ø 180 mm

Double-face light with transportation handle.
LED optic with Ø 180 mm (1 LED per face).
Power-up using a protected switch.

Power supply using 2-battery case 6V 4R25.
(batteries not included).
Standard model :
Operational autonomy in flashing mode : 250 hours.
Night operation only.
Theft prevention fixing.
One lock key supplied for the purchase of 4 lights.

1535	Light Ø 180/2 LEDs

BATTERY

⇢ **1535**

Light With Optic Ø 210

Single-face light with transportation handle, LED optic diameter 210 mm. Activated by a 3-position waterproof switch (24-hours, off, night).

Power supply using a 4-battery case 6 V 4R25.
(batteries not included).

Operational autonomy in double flash mode : 255 hours.

One lock key supplied for the purchase of 2 lights.

14386	Light Ø 210/80 LEDs

BATTERY

⇢ **14386**

BATTERY **RECHARGEABLE BATTERY** **230 V** **SOLAR** **P.L.S**

Intervention Triangle

700 mm Triangle equipped with 3 LED optics with Ø 70 mm.
Folding front/rear stand.
Stands locked using self-tightening strap.
Choice of symbol.

Power supply using rechargeable battery built into box.
Supplied with mains-charger power supply.
Operational autonomy in double flash mode: 35 hours.

26386	Intervention triangle 700 - class 2 With built-in rechargeable battery
6035	Class 2 - road sign 400 x 150 Single sided
35265	Class 2 - road sign 400 x 150 Double sided

⇢ 26386

⇢ 6035

ACCIDENT

Symbol of your choice

Tripod

700 mm tripod to place on the ground with 3 faces AK5 retro class 2 fluorescent prismatic.
Other symbol, Contact us.
Delivered with its storage bag.

36446	3-sided tripod 700 AK5 T2 prismatic fluo + PVC case

⇢ 36446

Emergency Traffic Guidance Kit

Set of **6 LEDs lights** (for emergency marking) in their own **storage and re-charging case.**
Mains and cigarette-lighter recharge included
Each lamp also has a magnetic attachment.
9 operating modes (fixed, flashing, rotating...).

30096	Blue Emergency Traffic Guidance Kit Rechargeable
30107	Amber Emergency Traffic Guidance Kit Rechargeable

⇢ 30107

High Strength

230 V

Cigarette-Lighter

Power Supplies

⇢ 393

⇢ 1953

⇢ 1992

⇢ 376

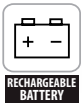## Rechargeable Battery

376	Rechargeable battery 12 V 200 Ah range
1992	Rechargeable battery 12 V 100 Ah range
1953	Rechargeable battery 12 V 75 Ah range
393	Rechargeable battery 12 V 40 Ah range
56356	Rechargeable battery 12 V 3 Ah range

RECHARGEABLE BATTERY

⇢ 1555

Battery Holder Box

Polypropylène battery holder box allowing the integration of a battery up to 75 Ah. External connection via 3-point XLR socket.

1555	Battery holder box

⇢ 26758

⇢ 21551

230 V

Battery Charger

Charge your batteries safely.
For each battery technology, there is a suitable charging curve.
Our chargers can recharge your batteries in accordance with manufacturers' recommendations.
Restore the initial capacity of your batteries while preserving them.

BOOST/rapid charge - ABSORPTION/équalisation - FLOATING/maintenance. These three curves are applied automatically in turn.
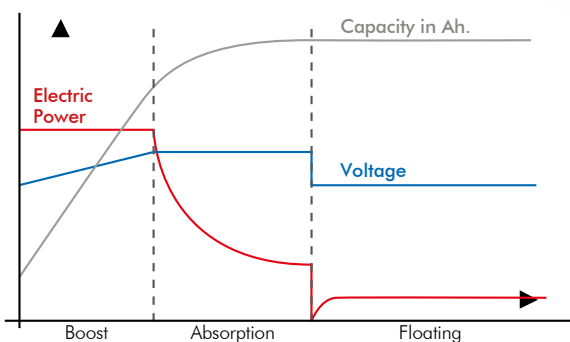
Our battery chargers provide high quality charge regulation which guarantees protection and a long battery operating life.

Charger for batteries from 100 Ah to 250 Ah :

21551	Battery charger range 300 W / 12 V

Charger for batteries from 50 Ah to 100 Ah :

26758	Battery charger range 100 W / 12 V

Capacity in Ah.

Electric Power

Voltage

Boost   Absorption   Floating

Eco-friendly
6x more*
autonomy

(*) than a 7 Ah battery

385

36029

Batteries 6 V 4R25

Carbon-zinc battery 6 V 4R25 7 Ah :

385	Battery 6 V 4R25 7 Ah range

Pile alcaline 6 V 4R25 45 Ah :

36029	Battery 6 V 4R25 45 Ah range

BATTERY
15700

NEW

BATTERY
17129

4R25 Battery Power Box

6 V 4R25 battery power supply box: *(batteries not included).*
Equipped with a dual flash mode electronics. Activated
by a 3-position waterproof switch (24-hours, off, night).
Connection via 3 jack sockets.

17129	2-battery power supply case jack Double flash mode
15700	2-battery power supply case jack Double flash mode

Mains Supply

Power supply 230 V / 12 V - 3 A in PVC housing.
This housing is compatible with all safety equipment.

1522	Alimentation secteur 230/12 V Connexion par fiche XLR

230 V

1522

Supply Using Public Lighting Source

Box allowing connection to the public lighting network.

34577	Public Lighting Source case 7 Ah Rechargeable battery included
1694	Public Lighting Source case 17 Ah Rechargeable battery included

P.L.S

34577

Solar Power Site Supply

Set consisting of a solar panel and an accumulator box,
including the regulation electronics and the battery.

29577	Solar power kit 20 W Connection via XLR plug
29578	Tri-flash control panel for solar power kit 17 Ah

SOLAR

29577

Intégral ™

Pre-equipped, ready to install.

The **Intégral**™ system is a concept : the idea of developing a coherent **customised ready-made assembly.**

Our **Intégral**™ design concept will ensure that we produce the equipment that you require.

Our human/equipment interface

The control of the equipment is based on ergonomic elements, offering real comfort of use.

Our control panels, are compact and fully configurable according to requests; they allow the integration of all functions.

Illuminated Signals

VEHICLES

CONTROL PANELS *P 26*

NEW

ROTATING BEACONS *P 28 - 29*

LIGHTBARS *P 30 - 31*

STREAMLINED INTEGRAL CLASSIC *P 36 - 37*

Control Panels

Configure your Intégral™ system to meet your needs : A control panel is available

Our Switches

In individual modular formats, up to «n» switch elements can be assembled together.
They offer two outputs protected by a 15 A fuse.
In the simplest solution the switch allows equipment to be controlled individually (one switch = one item of equipment).
The switch is illuminated when the equipment is in operation.
Set of pictograms provided.

|	
30216	1 Switch pack
	Supplied with base and set of pictograms
30217	2 Switch pack
	Supplied with base and set of pictograms
30218	3 Switch pack
	Supplied with base and set of pictograms

MEZZO 8 ECO
our all-in-one control unit

MEZZO 8 ÉCO is a control panel very compact and ergonomic, fully configurable. The keys are customisable and backlit depending on the active equipment.
It is designed to ensure complete control of a bidirectional ramp. It also includes 3 positive outputs for controlling additional equipment (rotating beacons, siren, triangle, spotlights, etc.).
The 12/24 V dual-voltage power module allows you to control up to three 10 A on-off auxiliary outputs protected by fuse. It also allows the control of a scrolling ramp.

43385	MEZZO 8 ECO control panel + power module + cable
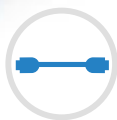
USB Connection	BUS single cable only	Quick setup	Adjustable stand	LED backlight	No relays	Pictograms collection

37852

55754

Sound Management Modules

37852	Sound generator - siren
	12/24 V 100 W
55754	Kit Public adress
	For siren HP micro

⇢ **41414**

⇢ **33898**

Search Lights

To efficiently light up a working zone with the possibility of remotely directing the light beam in various directions (from a distance of more than 25m). Our searchlights are studied to be able to give you a large use and installation flexibility. **Wireless remote control included.**

41414	LED search lights 30 W / 12 V
33898	Halogen searchlights 65 W / 12 V

Work Lights

LEDs Work Lights

This range of work lights will guarantee low energy consumption with high light intensity (on average: 80 Lumens /1 Watt). **Professional model suitable for extreme conditions.**

⇢ **30164**

⇢ **30162**

⇢ **30174**

⇢ **30167**

			Work lights	Magnetic fixing kits
Voltage	Power	Brightness	Reference	Reference
12/24 V	18 Watts	1260 Lumens	**30162**	**30633**
	24 Watts	2000 Lumens	**30164**	**30633**
	36 Watts	2520 Lumens	**30174**	**30633**
	72 Watts	5040 Lumens	**30167**	**30681**

All our LEDs work lights are also available with magnetic fixings

⇢ **30633**

⇢ **30681**

Magnetic fixing kit

Cigarette lighter plug

12V - 24 V

Move your lights, not your vehicle !

Thanks to our magnetic kit, you can position the work light anywhere on your vehicle. 5m extension included.

Rotating Beacons

HOMOLOGATION R10

HOMOLOGATION R65

⇢ 23392

⇢ 35785

LED Range

Available in flat base, tube or magnetic mounting (supplied with spiral cable and cigarette lighter socket), our LEDs rotating beacons have all the current advantages of the market :
- Dual voltage 12/24 V.
- Robust (polycarbonate dome).
- To be used with engine off.
- Very long lifetime.
- No maintenance (no bulb, no belt, no motor...).
- Ultra quiet.

CLASSIC Range

Voltage	Fixing	Mode	Colour	Reference
12/24 V	Flat	Rotating	Amber	35785
			Blue	contact us
		Flash	Amber	23391
			Blue	contact us
	Tube	Rotating	Amber	23392
			Blue	contact us
		Flash	Amber	23393
			Blue	24058
	Magnetic	Rotating	Amber	contact us
			Blue	
		Flash	Amber	
			Blue	

Wireless beacon

⇢ 52547

Amber **wireless rotating beacon** in flash and rotating mode. Operates on 2.6 Ah battery, autonomy of 6 hours (depending on the mode and state of charge of the battery). Easy charging using a spiral cord with cigarette lighter plug (provided), charging time 4 hours. Double magnetic and suction cup fixing system. Battery charge status indicator.

52547	Rechargeable wireless LED flash/rotating beacon Amber - magnetic & suction mount

Light Heads

Light Heads

LEDs penetration light, dual voltage 12/24 V:

21149	Light head 113 x 28 amber 12/24 V
43398	Light head 113 x 28 blue 12/24 V
43397	light head 133 x 45 bicolor amber/blue

⇢ 21149

⇢ 43398

Ultra thin

⇢ 43397   **Bicolor - amber / blue**

Bicolor LED

ACCESS Range
Optimized to meet the essentials

➔ 34855

➔ 30302   ➔ 30634

NEW

ACCESS Range

Voltage	Fixing	Mode	Colour	Reference
12/24 V	Flat	Rotating	Amber	30302
	Tube		Amber	30634
	Magnetic		Amber	34855

ACCES range blue : contact us

Connection Tube

1595	Screw-on tube
1597	Vertical fixing tube
1598	Horizontal fixing tube

➔ 1598   ➔ 1597   ➔ 1595

Mini Lightbars

Ultra-Flat Lightbars : ALPHA

36593	Amber ultra-flat lightbar 12/24 V, 24 LEDs, 355 mm Magnetic + Cigarette lighter plug
36294	Amber ultra-flat lightbar 12/24 V, 24 LEDs, 355 mm Fixing by central bolt

Control panel not included (to be select from page 26)

➔ 36593

➔ 36294

Lightbars

HOMOLOGATION **R10**

HOMOLOGATION **R65**

LEDs Lightbars

Multifunction streamlined signal lightbar Height 135 mm.
LED lights. Central module with back-lit text (double sided).

D.I.R

⇝ **35594**

POLICE MUNICIPALE

⇝ **35604**

Voltage	Length	Number of lights	Colour of lights	Text	Reference
12/24 V	970 mm	2	Amber	Yes	**35594**
		4	Amber	Yes	**35598**
				No	**35592**
	1400 mm	2	Amber	Yes	**35596**
		4	Amber	Yes	**35600**
			Amber / Blue	Yes	**35604**

Halogen Lightbars

Multifunction streamlined signal lightbar Height 135 mm.
Halogen lights. Central module with back-lit text (double sided).

INTERVENTION

⇝ **35597**

POLICE MUNICIPALE

⇝ **35603**

Voltage	Length	Number of lights	Colour of lights	Text	Reference
12 V *	970 mm	2	Amber	Yes	**35593**
		4	Amber	Yes	**35597**
				No	**35590**
	1400 mm	2	Amber	Yes	**35595**
		4	Amber	Yes	**35599**
			Amber / Blue	Yes	**35603**

* For 24 Volts: please contact us

Magnetic option & customised lightbars :
Contact us 📱✉@

Standard Flat Lightbars : EPSILON

39953

This ultra low profile lightbar, length 1080mm, is composed of 36 yellow power LEDs.
A blank central text space (448mm), on both sides, with a text of your choice.

39953	Flat lightbars 59 mm
	36 LEDs length 1080 mm

42121
Also available in blue

Synchronized flash :
12 blocks of 3 yellow LEDs, 18 LEDs on the front panel and 18 yellow LEDs on the rear panel. As well as 4 blocks of 6 wide-angle yellow LEDs (2 on each side).

42121	Flat lightbars 59 mm
	60 LEDs length 1252 mm

45591

Bicolore LED amber & blue :
4 blocks of 3 yellow LEDs, 6 LEDs on the front panel and 6 yellow LEDs on the rear panel. 4 blocks of 3 blue LEDs, 6 LEDs on the front panel and 6 LEDs on the rear panel. Central white module with free text.

45591	Flat lightbars 59 mm
	48 LEDs length 1252 mm

Control panel not included (to be select from page 26)

Operating mode
Flash, Scrolling, Alternative mode

Color
Led, Lens

Size

N°1 on modularity
Options to fit your needs

Contact us 📱✉

Special Flat Lightbars

Bicolore LED

We can modulate our lightbars to your needs.
Consult us for specific requirements.
We can adapt the size of our lightbars for a better fit into the vehicle, and offers you specific functionning mode, colors and polycarbonate lenses that suits your requests.
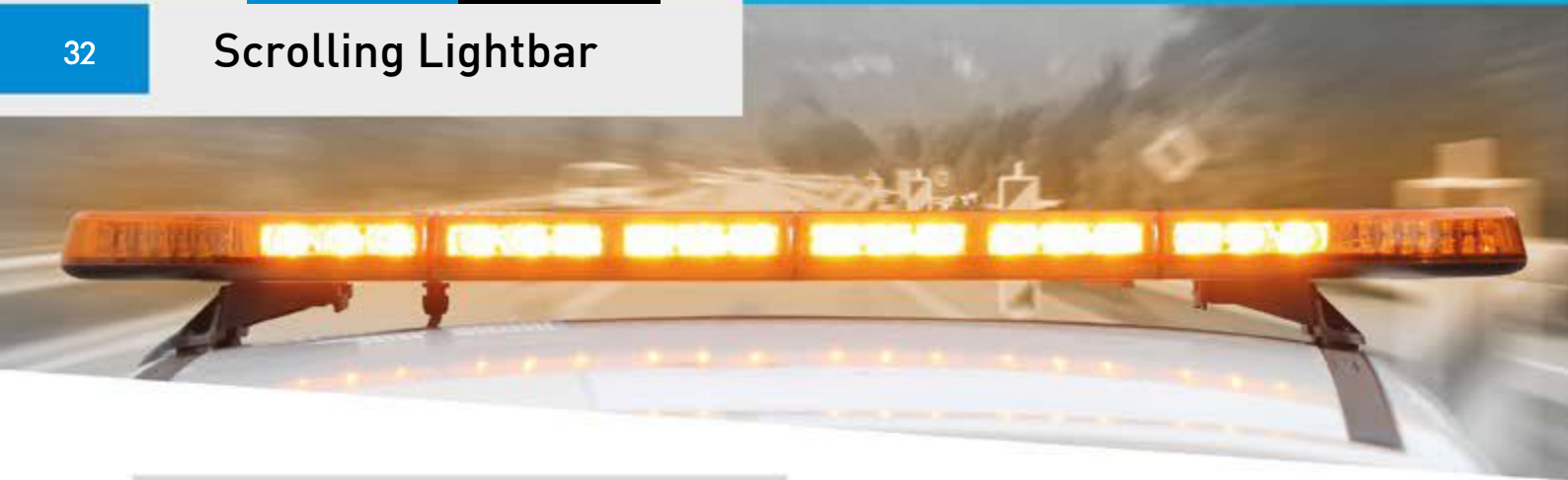
Example :
2 in 1 : a scrolling bar at the rear of the vehicle, **a lightbar** on the font and on the sides. 12 blocks of 3 yellow LEDs, 18 LEDs on the front and 18 LEDs on the back. 2 blocks of 6 wide-angle yellow LEDs on each side.

2 in 1 : scrolling & illuminated ramp

39954

39954	Flat lightbar 59 mm
	60 LEDs length 1252 mm

Scrolling Lightbar

Scrolling Lightbar

2 in 1 : a scrolling bar at the rear of the vehicle, **a lightbar** on the font and on the sides. 12 blocks of 3 yellow LEDs, 18 LEDs on the front and 18 LEDs on the back. 2 blocks of 6 wide-angle yellow LEDs on each side.

| 39954 | Flat lightbar 59 mm |
| | 60 LEDs length 1252 mm |

Ultra-flat scrolling lightbar:

| 37866 | Scrolling lightbar 8 LEDs lights |
| | Control panels below |

| 43385 | MEZZO 8 ECO control panel + power module + cable |

2 in 1 : scrolling & illuminated ramp

⇢ 39954

⇢ 37866

⇢ 43385

⇢ 30222

Streamlined scrolling lightbar :

| 30222 | LEDs scrolling lightbar 5 lights |
| | and 2 LEDs rotating beacons |

With triangle AK5 500 or 700 class 2, with electrical lifting system, and 2 LEDs rotating beacons.

| 27473 | LEDs scrolling lightbar |
| | Triangle 500 class 2 |

| 21968 | LEDs scrolling lightbar |
| | Triangle 700 class 2 |

Control panel not included (to be select page 26) **(switches not compatible)**

⇢ 27473

Lighted Directional Traffic Arrows

These arrows are composed of 2 aluminum panels, assembled with a rubber watertight gasket.
Fixing with back rails. Magnetic fixture is optional.

Control panel is not included (to be select page 26) :
The arrows can be controlled by the 2 switch pack (reference 30217, not included).
Contact us when a complete solution is required, with added triangles and rotating lights.

➔ 38789

Lighted Directional Traffic Arrows (16 optics)

Blinking arrow (1000 x 400 x 50 mm), 16 lights Ø 70 :
Arrow with low consumption LEDs, single sided.

38789	LEDs blinking arrow

➔ 1585

Lighted Directional Traffic Arrows (14 optics)

Blinking arrow (720 x 720 x 50 mm), 14 lights Ø 70 :
Arrow with low consumption LEDs, single sided.

1585	LEDs blinking arrow

Directional Light Arrow
Flashing and Magnetic (8 optics)

Directional light flashing 8 lights Ø 70 :
The traffic direction, right or left, is determined by the direction of installation of the luminous arrow.
Supplied with 10m cable and cigarette lighter plug.
Warning, this product cannot be used on a driving vehicle.

24006	LEDs flashing arrow 12V power supply

➔ 24006

Light Triangle

Regulatory signaling device for all vehicles and machines which are placed on the road during work or mobile road intervention.

- ● **Ultra-flat optics.**
- ● **8 power LEDs.**
- ● **Protected by polycarbonate lenses.**

⇢ **1566**

500 mm Triangle Range with LED Optics

- Dimensions : 500 mm.
- Anodized aluminium box.
- The light element is composed of three optics of Ø 70 mm on each side
- Dual voltage without bulb change (12 or 24 V).
- Supplied with 10 m power cord.

Double sided 500 mm :
Mounting on double-acting hinge, for a forward or backward tilt of the box.

1566	Light triangle AK5 500 - double sided Class 2

Single sided 500 mm :
With rails fixed on the back.

1570	Light triangle AK5 500 - single side Class 2 - With rails fixed on the back

⇢ **1570**

⇢ **1567**

700 mm Triangle Range with LED Optics

- Dimensions : 700 mm.
- Anodized aluminium box.
- The light element is composed of three optics of Ø 70 mm on each side
- Dual voltage without bulb change (12 or 24 V).
- Supplied with 10 m power cord.

Double sided 700 mm :
Mounting on two double-acting hinges, for a forwards or backwards tilt of the box.

1567	Light triangle AK5 500 - double sided Class 2

Single sided 500 mm :
With rails fixed on the back.

1571	Light triangle AK5 700 - single side Class 2 - With rails fixed on the back

Option

Manual folding kit :

1576	Manual folding kit

⇢ **1576**

Create your own **Intégral**™

or select a standard configuration :

--› **1956 Triangle 500**

--› **1959 Triangle 700**

--› **35341**

--› **37866**

2 Elements Configuration

Pre-equipped assembly including :
1 roof rack.
1 amber LEDs beacons.
1 LEDs triangle 500 mm or 700 mm.

1956	Configuration n°2 Triangle 500 class 2
1957	Configuration n°3 Triangle 700 class 2

Control panel not included (to be select page 26).

3 Elements Configuration

Pre-equipped assembly including :
1 roof rack.
1 amber LEDs beacons.
1 LEDs triangle 500 mm or 700 mm.
2 LEDs work lights.

1958	Configuration n°4 Triangle 500 class 2
1959	Configuration n°5 Triangle 700 class 2

Control panel not included (to be select page 26).

Options **Intégral**™ Classic

Manual folding kit :

1576	Manual folding kit

8 lights LEDs scrolling lightbar :

37866	8 lights LEDs scrolling lightbar (control panel ref 43385 not included)

Intégral™ Streamlined Classic

Reinforced durability
Triangle anodized aluminum /
LEDs / aluminum chassis

Intégral™ Streamlined Classic

Manual Lift :
1 LEDs triangle 500 mm or 700 mm. 1 power supply cable
length 10 m with cigarette-lighter plug 1 magnetic fixing kit.

« The all-in-one » removable or fixed.

Universal system, without roof rack it is immediately suitable for all vehicles.

Delivered assembled **ready to operate**	Only 10 kg	**Cigarette lighter** power supply **12/24V**

29112	With triangle AK5 500 mm Class 2
29113	With triangle AK5 700 mm Class 2

⇢ 29112

Electrical Lifting System :
1 LEDs triangle 500 mm or 700 mm. 1 power supply cable
length 10 m. 1 magnetic fixing kit.
Supplied with a 1 switch pack.

29963	With triangle AK5 500 mm class 2 Electric Lift
29964	With triangle AK5 700 mm class 2 Electric Lift

⇢ 29963

It is necessary to add a fixing option to your electrical lifting system fairing :

Roof rack fixings option :

38492	Optional roof rack fixings

Adhesive fixings kit :

29053	Optional adhesive fixings

Removable : Magnetic
Fixed : Adhesive

⇢ 29053

Intégral™ Streamlined Classic

Options

Create your own Intégral™

Beacons, scrolling lightbar, work lights, paint...

→ 29030

→ 30223

↳ 37866

OPTIONS

Tell us your requirements, we have the solution!

■ Intégral™ Streamlined Classic Options

2 LEDs beacons kit :

| 29030 | Optional two rotating beacons with amber LEDs. (For other beacons please contact us) |

2 LEDs work lights kit

| 30223 | Optional two LEDs 18 W work lights (For other work lights please contact us) |

8 lights LEDs scrolling lightbar :

| 37866 | 8 lights LEDs scrolling lightbar |

Manual folding kit :

| 1576 | Manual folding kit |

RAL color of your choice !
All our fairings have a professional level of powder-coating finish.
The use of a polyester powder paint guarantees the best paint resistance.
By default the fairing is white.

Fixings

Universal adhesive system

→ 38410

→ 4765

Universal Fixing Kits

System without need of drilling :
Fits all brands and types of vehicles.

38410	Adhesive fixing kit for Integral Classic
	3M adhesive tape

System requiring drilling
Roof bar with drilled fixing system.

4765	Drilled fixing kit
	K1P1 rack

Whatever your vehicle, a suitable system is available

Contact us 📱✉

→ 1616

→ 1614

→ 1612

→ 2232

→ 1618

→ 1620

→ 1607

Roof Rack For Vehicles

Complete kit (pair of fastenings + roof bar)
Please specify the correct vehicle type and its year of manufacture (fixings may vary from one year to another).

1614	Renault Master / Mascotte
1615	Renault Clio
1616	Renault Kangoo
2232	Renault Master Mascotte (Benne)
5283	Renault Trafic / Opel Vivaro
1617	Peugeot Boxer / Citroën Jumper
1618	Peugeot Expert / Citroën Jumpy
1620	Peugeot Partner / Citroën Berlingo
24568	Fiat Doblo
20998	Fiat Fiorino
2231	Mercedes Vito
23077	Mercedes Sprinter / V W Crafter
14301	Opel Combo
1622	Iveco Daily
24436	Nissan Cabstar / Renault Maxity

Vehicles with roof gutters :
Complete kit for vehicles equipped with roof gutters.
1 pair of adapters and a roof rack.

1607	Standard gutter-system roof-rack

A cut perfectly adapted to the vehicle
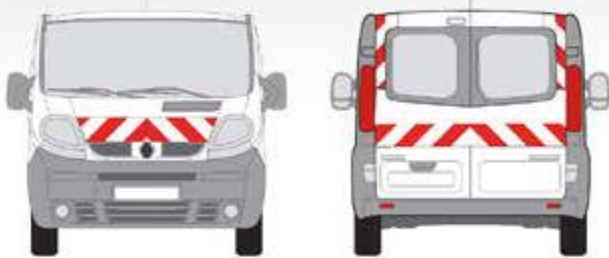
Minimum lateral   Maximum lateral

Article 2 : approves the new requirements in book 1 of the inter-ministerial instructions on road signals shown under the heading «Part 8": temporary signals.

Article 122C booklet part 8e : mobile equipment.
Mobile equipment forms an obstacle which must be made particularly obvious. Vehicles which regularly work on the roadway must carry signals in accordance with the requirements of the order of 20 January 1987.

Requirements of the Order of 20 January 1987 :
Minimum surface area per vehicle, 0.80 m².
Front : 0,16 m² - **Rear :** 0,32 m².
Right side +left side : 0,32 m².
Homologated by DSCR, under the TPESC number shown on each white stripe.

Pre-Cut Kit

Appropriate for the vehicle, available in class 1 and class 2. Minimum front and rear + side kit or maximum front and rear + side kit. **Contact us.**

Box Of 2 Rolls

Includes the left side and right side roll.
Red and white traffic guidance.

1966	Rolls Class1
	2 rolls 9 m / width 0.14 m
1967	Rolls Class 2
	2 rolls 9 m / width 0.14 m

⇢ **1966**

⇢ **1967**

Magnetic Strip

1972	Magnetic «service» strip Class 1
	50 x 15 cm
1973	Magnetic «service» strip Class 2
	50 x 15 cm

⇢ **1972**
⇢ **1973**

Municipal Police Vehicle Screen-Print

Decree no.2005-425 of 28 April 2005
(published in the journal officiel of 7 May 2005).
- **Front :** 800 x 400 mm 'Police Municipale' with red margin and blue text screen printed on 2 lines.
- **Rear :** 3-colour badge 96 x 120 mm. Strip 720 x 90 mm 'Police Municipale' with red margin and blue text screen printed on 1 line, class 2.
- **Side :** : Blue strip 14 x 120 mm.
  Triple 'Gitane' stripe 120 x 14 mm.
  Triple 'Gitane' stripe with red 'Z' 14 x 120 mm.
  3-colour badge 240 x 300 mm.

12866	VL Kit 'Police municipale'

⇢ **12866**

Screen printing for other types of vehicles available : Contact us.

Intégral™ Dynamic

The **Intégral**™ concept : all our safety equipment are integrated in a coherent and customized signaling device.

The **Intégral**™ Dynamic, it is the insurance to get the equipment you need. Our control units and our interfaces will allow you to easily integrate all of your vehicle and on-board signaling projects.

Our **compact** and **ergonomic control panels** are fully configurable. The keys are backlit. Two sizes of control units: 4,3''and 7'' in diagonal, suitable for light or heavy duty vehicles.

NEW

**Micro-lift
VMS 1 + 3 lines**

A new addition to our on-board range, here is a compact lift, capable of relaying messages of 1 to 4 lines.

Illuminated signals

ON-BOARD

CONTROL PANELS *P 43*

ON-BOARD RANGE *P 44 - 47*

EMERGENCY LIGHT ARROW *P 47*

TRAILERS *P 48 - 53*

General Description

VMS for light utility vehicles

For the equipment of your light utility vehicles, we recommend the character heights : **H160** and **H200** mm of 8 to 10 characters with spacing or 12 characters in a **continuous matrix.**
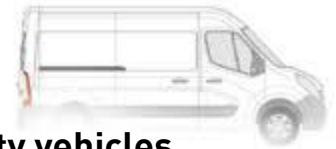
VMS for heavy duty vehicles

For the equipment of your heavy utility vehicles, we recommend the character heights : **H200** and **H250** mm in 9 to 10 characters with spacing or 12 characters in a **continuous matrix.**

Our **Intégral**™Dynamic concept integrates our entire range of **certified** displays in 7 x 5 matrix or continuous matrix.
Certification requires complete control of photometric and heat resistance parameters, making our displays **the most efficient displays** on the market .
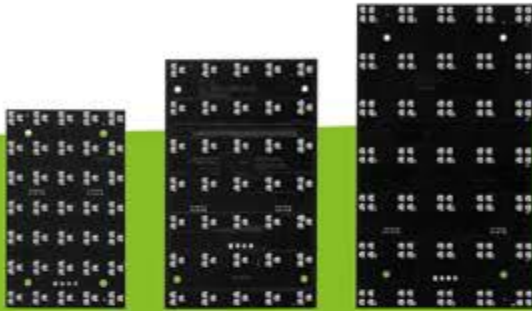
CE certified to EN12966 standard
Visit the site : www.ascquer.fr

Fast maintenance

BUS 80 A & Control Electronics Cards Reliability / Modularity

The **Intégral**™ Dynamic it is the first signaling system to have a complete modular BUS with electrical and data connection. With no more hard-to-extract cables, the BUS 80A provides guaranteed reliability and ease of maintenance. This expandable BUS on one hand distributes electrical supplies of up to 80A and on the other hand high flow CAN. It incorporates a general cut-out relay.
There are two configurations available: 2 slots and 4 slots.

The **Intégral**™ Dynamic is the first signaling system to have a set of control electronics cards allowing it to respond to all applications in a standard and modular manner.
Functions relating to VMS, lifting, auxiliary, scrolling light bars, emergency light arrow, analog and digital inputs functions can all be combined using the 3 Integral Dynamic base cards.

Modular chassis

The chassis of the **Intégral**™ Dynamic are mechanically assembled using stainless steel screws, from a library of standard parts common to all equipment. The screw assembly technique and the standardization of parts allow unrivaled maintenance comfort, within the reach of all maintenance workshops without any particular qualification, without delay !

All our frames benefit from a professional powder-coating finish. The use of a polyester powder paint makes it possible to guarantee the best paint resistance.

ALTO 4.3"

The **ALTO 4.3"**, 11 cm diagonal control panel is particularly suitable for light goods vehicles: Kangoo, Nemo, Berlingo, Jumpy, Partner, Expert, Doblo, Fiorino, Scudo etc.
It has a 16/9 screen - 480 x 272 pixels – high luminosity 400 cd/m², +/-60° angle for unmatched ease of use.
Guaranteed to operate between -30°C and +75°C.

The **ALTO 4.3"** is made for use in all difficult environments.
It includes all commands for VMS, triangles, lifting, beacon auxiliaries, working lights, scrolling lightbars etc.
Update by USB key.

32702	Control panels ALTO 4.3"

USB Connection
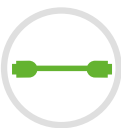
BUS single cable only

Quick setup

PC setup

Adjustable stand

Écran LCD
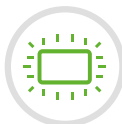
LED backlight

USB Connection

Dual pivot mount

ALTO 7"

The **ALTO 7"** 18 cm diagonal control panel is suitable for all types of vehicles. It has a 16:9 screen – 800 x 480 pixels high brightness 400 cd/m², +/-60° angle for unrivaled comfort of use.
Guaranteed to operate between -30°C and +75°C.

The **ALTO 7"**, is made for all difficult environments.
It integrates all VMS controls, triangles, lifts, gyro auxiliaries, work lights, scrolling ramps, emergency light arrow, etc.

The **ALTO 7"** has a dual port for front and rear cameras as standard. With a GSM modem, you will be able to transmit images in real time to your control PC. Updated control box by USB key.

34023	Control panels ALTO 7"

Wide angle camera

44

On-Board Range

VMS - Variable Message Sign

Our variable message signs installed directly on the vehicle are equipped with high light intensity LED displays. Created for temporary mobile signaling on roads and highways, they inform users of traffic conditions.

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera etc.).

VMS 1 + 3 Lines

NEW

- VMS : new generation energy-saving displays, H125 mm (2 LEDs per point) 12 characters..

- Automatic brightness switching thanks to a day and night cell.

- Lifting system using electrically operated cylinder, equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera etc.).

Safety auxiliaries available as options

A wide range of additional accessories allowing you to create equipment that fully meets your requirements: Beacons, spotlights, anemometer, rearview camera, siren etc.
Please contact us to configure your on-board equipment.

VMS + Triangle 500 / 700

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell .

- Double sided triangle 500 or 700 mm :
  - Aluminum sheet with flanged edges.
  - Class 2 adhesive, symbol of your choice.
  - Equipped with 6 Ø 70 mm optics with 30 LEDs.

- Lifting system using electrically operated cylinder, equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

VMS + Triangle 1000 / 1250

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Double sided triangle 1200 mm :
  - Aluminum sheet with flanged edges.
  - Class 2 adhesive, symbol of your choice.
  - Equipped with 6 Ø 200 mm optics with 80 LEDs, protection by polycarbonate lens.

- Lifting system using electrically operated cylinder equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

On-Board Range

VMS + Triangle 1250 Pictogram

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Triangle 1250 mm :
  - Two-colour graphic matrix.
  - Allows the display of "large" type A range panels.

- Lifting system using electrically operated cylinder equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

VMS + 16 optics Arrow (KR42)

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Double sided triangle 500 or 700 mm :
  - Aluminum sheet with flanged edges.
  - Class 2 adhesive, symbol of your choice.
  - Equipped with 6 Ø 70 mm optics with 30 LEDs.

- KR42 type arrow: 16 optics Ø 70 mm with 30 LEDs.

- Lifting system using electrically operated cylinder equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

Safety auxiliaries available as options

A wide range of additional accessories allowing you to create equipment that fully meets your requirements: Beacons, spotlights, anemometer, rearview camera, siren etc.

Please contact us to configure your on-board equipment.

Illuminated Emergency Arrow

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Illuminated Emergency Arrow type KR43 : 23 optics Ø 200 with 80 LEDs, protection by polycarbonate lens.

- Lifting using electrically operated cylinder equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

Illuminated Emergency Arrow
+ Triangle 1250 - Foldable System

- VMS : new generation energy-saving displays, different sizes to choose from H160, 200, 250 mm (3 to 4 LEDs per point) ranging from 8 to 12 characters.

- Automatic brightness switching thanks to a day and night cell.

- Triangle 1250 mm single or double sided :
   - Aluminum sheet with flanged edges.
   - Class 2 adhesive, symbol of your choice.
   - Equipped with 3 optics for the single-sided triangle or 6 optics for the double-sided triangle.

- Illuminated Emergency Arrow type KR43 : 23 optics Ø 200 with 80 LEDs, protection by polycarbonate lens.

- Dual independent lifting using electrically operated cylinder equipped with a limit switch.

- Standard RAL paint of your choice.

- Latest generation ALTO control panel with update by USB key.

- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

FLR Trailers

■ Long operational autonomy

With its 2 batteries each of 200 Ah, the FLR Trailer can achieve a record operational autonomy of 180 hours

180 hours of autonomy

■ Galvanised 750 kg chassis

The 750 kg chassis made entirely of galvanised steel can be towed by a light vehicle with no special licence required.
It is equipped as standard with an adjustable height drawbar and a self-braking system.

Towable by a light vehicle without a specific license

750 KG

■ 100% LEDs Technology

The optics of diameter 200 mm are made up of a lighting element with 80 high-luminosity yellow SMC 5 mm LEDs. This lighting element is integrated in a ABS dome.
The front part is protected by a transparent lens made of polycarbonate (high impact resistance).
There is guaranteed water-tightness between the polycarbonate lens and the dome, provided by a circular seal.
The assembly is fully dismountable.

Adjustable Drawbar

Self Braked

■ Easy to use

Simple and user-friendly, our FLR trailer facilitates the work of operators, both on the road and in the workshop. A 230 V cord winder ensures permanent storage of the charging cable. A simple, lockable box that holds all of the power supplies.
The deployment of the FLR is carried out from a local command or from a remote box.

100% LED

■ Local control cabinet

Our local control cabinet. A digital display enables a clear real time communication between the user and the equipment.
LED indicators are displaying the actual message at the back of the trailer, even from long distance

Protected

FLR Trailer

New generation trailer with LED optics, specifically designed for traffic guidance of mobile sites and urgent work on roads and motorways.

Structure :
• Single axle chassis 750 kg.
• Manual stabilisers.
• Parking brake.
• Adjustable draw-bar.
• Large capacity service chest.
• 25 flashing optics Ø 200 mm.
• 2 flash optics Ø 300 .
• 1 B21 sign of diam 1250 class 2, motorised and disengageable.
• Red and white chevrons class 2.

Operational autonomy :
• Long operational endurance :
  180 hours with 2 batteries 12 V - 200 Ah.

Low maintenance costs :
Due to LEDs optics, no bulbs to change.

Simplified controls :
The control module provides one-touch control of your signals.

Modular design :
• Generator set.
• Charger for 12 V batteries.
• Control panel on unit or remote operation using a radio or cable link.
• Inertial braking.

Power :
Batteries / charger for 12 V batteries / mains lead reel / generator set available as option.

25878	Single axle trailer

Remote Control Device

The trailer is equipped with a remote-control box (IP67), cable, (15m) and / or radio. It takes the functionality of the local console, while adding new functions :
• Faithful view of the FLR.
• Scenario mode (single command for FLR and B21).
• Fine-tune fault management.
• A 4-indicator battery gauge.

The repeaters remain active on the local console in case of control by the remote console.

The remote control unit allows you to manage FLR commands remotely, safely from the cabin of the towing vehicle or near the trailer.

35514	Radio control panel

⇢ 35514

RADIO or WIRED remote control

VMS Trailers

Selectable power supply

Towable by a light vehicle without a specific license

750 KG

Self Braked

Adjustable Drawbar

100% LED

Certified displays

Protected

Power supply

The electrical modularity of the VMS trailer allows it to be powered by different energy sources : batteries, 230 V, generator, solar energy.

Galvanised 750 kg chassis

The 750 kg chassis made entirely of galvanised steel can be towed by a light vehicle with no special licence required.
It is equipped as standard with an adjustable height drawbar and a self-braking system.

Ease of use and maintenance

Easy to use, our VMS trailer makes the work of operators easier, both on the road and in the workshop. A simple, lockable box brings together all the power supplies. Access to the displays is by opening the rear door of the box.

100% LEDs Technology

200 mm H displays composed of a 7x5 matrix with 3 LEDs per pixel, for a total of 105 high brightness 5 mm yellow SMD LEDs. This light element is integrated into a one-piece box made of mechanically welded TTS aluminum profile. It is covered with a black oven-baked epoxy paint. The front panel is made of 4 mm anti-UV polycarbonate for maximum protection.

The assembly is completely removable for simplified maintenance.
Our displays are CE EN12966 certified

Control unit

The modularity of the VMS trailer allows control by different systems locally or remotely: encoder wheel, local control box with LCD screen, updates via USB key, remote control via 4G modem, supervision software, etc.

Control panel ALTO

VMS Trailers

This variable message sign on-board a trailer is equipped with high light intensity LED displays. Created to provide temporary mobile signaling on roads and motorways, they provide road users with information on traffic conditions.

Structure :
• Self-braking chassis / single axle 750 kg (Towable weight 830 kg) • Made of galvanised steel • Manual stabilisers • Parking brake • Adjustable drawbar.

Display :
• 1, 2, 3 or 4 lines of 12 characters.• Characters Hc200-4, matrix 7 x 5 • 3 yellow LEDs per point • Red and White chevrons class 2.

Simplified controls :
• In local mode messages are selected using the ALTO 4.3" control panel or encoder wheel or via PC connection.
• In remote mode, communication using GSM network, radio etc.
• Automatic luminosity management.

Programming :
• Programming using a laptop PC / Software and linking cable provided.
• Messages are updated via USB key or connection cable between the PC and the trailer.

Modular design :
• Generator set • Charger for 12 V batteries • Electrically operated stabilisers • Inertial braking • GSM modem.
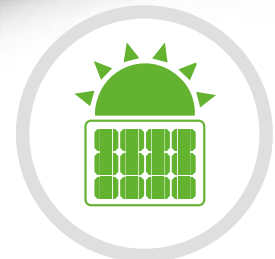
Power supply :
• Batteries • Charger for 12 V batteries • Mains lead reel
• Generator set available as option.

32775	Single axle trailer 750 kg

Single axle trailer, 4 lines of 12 characters, character height 200 mm, 3 LEDs per point.

NEW

SOLAR

Solar power supply option :
600 W photovoltaic panel.

54595	Photovoltaic option for VMS trailer

Picto Trailers

Two-Color Picto. Trailer

Assembly of a fixed part (A14 steel panel with warning arrows, and a matrix panel with a high intensity LED display), on-board a trailer.

Structure : single axle chassis of 750 kg.
Manual stabilizers / Parking brakes / Inertial breaking / Adjustable height drawbar.
4 stands for manual stabilization.
Hot-galvanized steel structure, chassis and mechanisms.
Semi-automated jockey wheel lifting, spring blocking, and reinforced tyre wheel.

Picto Bichrome display : Bichrome matrix display box, size 1550x1550 mm.
56x56 points resolution (3136 yellow LEDs and 3136 red high intensity LEDs).
Display of panel codes A, B and KD in 1250 mm.

Energy : 12 V operation.
Electricity generators. Plug for charging on mains voltage.
Electricity distribution panel with circuit breaker and fuse.

Control electronics : Coating protected control board, mounted in waterproof cabinet.

Control unit : Message selection with the encoder.
Automatic light intensity adjustment (day/night cell).

Programming : With portable computer (not included).
Software and linking cable provided.

39767	Pictogram Bichrome trailer, single axle

PC setup

Matrix Display Trailer

Assembly of 2 variable message signs, equipped with high light intensity LEDs, on-board a trailer.

Structure : Single axle chassis 1300 kg.
Manual stabilisers / Parking brake / Inertial braking / Adjustable height drawbar.

Fixed lower part display : Monochrome graphic 128 x 96 point matrix. Used to display text, KD signs, animations.

Moving upper part display : Two-colour graphic 48 x 48 point to 64 x 64 point matrix. Used to display «normal to very large» range signs of type A, B and KD.

Control : On site, by laptop PC or encoder. Remotely, by GSM link, radio etc

Programming from a PC : Software provided. Files backed-up on hard disk. Programming of messages, animations, signs from a library.
Multi-level access code for security of programming.

Modular design : Generator set / batteries charger / electrically operated stabilisers / GSM modem.

Energy : 230 V.

13763	Pictographic single axis trailer

Full-Color Picto. Display URBAN Trailer

Set composed of a folding panel equipped with high light intensity Full-Color LED matrix displays and a fixed part (sheet metal panel composed of warning chevrons), loaded on a trailer.
Small trailer 2370 x 1294 mm (dimensions excluding drawbar), which can be installed in a standard parking space.

Structure : Single axle chassis 1300 kg.
Manual stabilizers / Parking brake / Inertia braking / Height-adjustable drawbar.
4 crutches with manual stabilization.
Structure, chassis and mechanisms in hot galvanized steel.
Jockey wheel with semi-automatic lifting and spring locking, reinforced tire.
Powder-coated steel panel support structure. Foldable using an electric cylinder for deployment assistance. Locks in folded and unfolded position.

Picto Full-Color Display : Full-Color matrix graphics box with 16 million shades.
Display dimension 1024 x 1280 mm.
Definition 64 x 80 points (i.e. 5120 high light intensity Full-Color LEDs).

Text only display :
• 7 lines of 9 characters character height 112 mm.

Pictogram + text display :
• Pictogram range 700 + 3 lines of 9 characters character height 112 mm.
• Pictogram range 1000 + 2 lines of characters character height 112 mm.

Pictures:
• Any type of image of 64 x 80 pixels max.

Energy : 12 V operation. Generator. Power socket for mains charging. Distribution panel with circuit breaker and fuse.

Control :
Remote control: Slot + power supply for Cisco 4G router (router not supplied)
Local control: IP socket on Cisco router / basic local control software for PC compatible computer.
Automatic brightness management (day/night cell).

55078	Full-Color urban pictogram micro trailer

NEW

Even more economical and environmental friendly equipment & power supplies

Stand-alone photovoltaic power supply :

This is an independent and low-cost method of power supply.
No civil engineering, connection or subscription costs.

Example of economic and environmental summary for two 1000 mm LED triangles over 10 years :

850 KW/h saved,
5000 € saving on electricity consumption and subscription costs.

390 Kg of CO²
not emitted.

Supply using public lighting :

Connection to a public lighting pylon with differential protection.
Low civil engineering cost.

eco-efficient

Illuminated Signals

PERMANENT

SIGN LIGHTING EQUIPMENT *P 56*

CURVE LIGHT-SIGNALING *P 57*

ENHANCED SIGNALING *P 58-59*

SPEED RESPECTED = GREEN LIGHT

GREEN-REWARD TRAFFIC LIGHTS *P 66-67*

Sign Lighting Equipment

Reinforcing all Danger, Prohibition and Information signs

Static signals are not always enough for passing on information to road users. Increasingly either illuminated enhancements, or one or more «flashing» lights are used in association with these signals **in order to attract the attention of road-users.**

⇨ 5559

⇨ 1684
⇨ 1686
⇨ 3156

Optic Ø 300

Optic Ø300 mm with 225 yellow LEDs, (others colors on-demand). Fixing on double rail on the rear side. Polycarbonate protection lens. Integrated contrast screen (500x500 mm / epoxy powder coated paint).

1684	Optic Ø300/225 LEDs 230 V Flashing mode
1686	Optic Ø300/225 LEDs 230 V Double-flash mode
3156	Optic Ø300/225 LEDs 12 V Model for Public Lighting Source or solar power supply
5559	Shield for Ø300mm optic

Optic Ø 200

Optic Ø200 mm with 80 yellow LEDs. Fixing using rear plate (mast of 60 to 168 mm diameter).

1665	Optic Ø200/80 LEDs 230 V Flashing mode
1666	Optic Ø200/80 LEDs 230 V Double-flash mode
1660	Optic Ø200/80 LEDs 12 V Model for Public Lighting Source or solar power supply
879	Shield for Ø200 mm optic
35629	Contrast screen for Ø200 mm optic 350 x 350 mm

⇨ 879

⇨ 1665
⇨ 1666
⇨ 1660

⇨ 35629

Optic Ø 130

Kit with 2 optics Ø130 mm with 30 yellow LEDs (other colors available). Double-flash operating mode.

2306	Kit Biflash Ø130/30 LEDs 230 V Equipped with a control / 230/12V power supply box.
35837	Kit Biflash Ø130/30 LEDs 12 V Model for Public Lighting Source or solar power supply

⇨ 2306

Options

Speed or presence detection radar, timer etc.
Adapt equipment to meet your requirements, options on pages 62 and 63

No need to connect the equipment together :

NEW

All these products can be equipped with our **GPS synchronization option !**

No more interconnecting equipment; this option, combined with a viable solar power supply, results in a completely autonomous product, thereby significantly reducing installation constraints and costs (civil engineering/road closures) as well as operational expenses (electricity subscription).

Contact us

GPS TECHNOLOGY

Scrolling Optic

Optic Ø 200 mm with 80 yellow LEDs.
Functionning mode for a better safety :
Running sequence overlaid with drag effect to mark the curve.

35932	Optic Ø 200/80 LEDs scrolling 230 V Wired connection
3511	Optic Ø 200/80 LEDs scrolling 12 V Wired connection

Alternative power supply solutions: Contact-us.

37259	Automatic day/night dimming cell option

Chevron PPRF BTR synchro

The Reinforced Police Panel (PPRF) BTR series, with a low thickness, see pages 58-59.

Contact us :
All sizes (600x600 / 800x800/...).
Different power supplies (230 V, Public lighting, Solar power).
Communication of your choice (wireline, radio, GPS).

Enhanced Signaling J4 + Optic Ø 200

Scrolling light signals for turns, from 5 to 32 sets.
The reinforced panel J4 400x400mm is composed of a thin aluminium box (70mm).
Epoxy paint finish, silver grey color (metal).
Rear fixing by double rail.
The front face is protected by a 3mm polycarbonate.
The adhesive is in class 2.

Optional: Ø 200 mm optic.

The scrolling synchro control unit is attached to the back of the J4 panel.

Contact us :
Other sizes (600x600 / 800x800...).
Different power sources (230V, SEP, Solar).
Communication of your choice (wired, radio, GPS).

Power supplies
To power your equipment see the various power supplies available on pages 64 and 65.

Enhanced Signaling

Gamme PPRF BTR

The enhanced Police sign (PPRF) in the BTR range, has a low thickness and is made up of two aluminium signs with folded dropped edges, assembled using an elastomer seal.

Epoxy paint finish, silver-grey colour RAL 9006.
It is equipped with 3 m of cable.
Rear fixing using double rail.

The border is enhanced by two rows of red LEDs (for C signs: one row of blue LEDs).
The symbol is enhanced by yellow LEDs on the border (for C signs: one row of white LEDs).

The panel must be connected to a power source: 230 V, on public lighting, or solar.

Electronics fully encapsulated in resin

electronic
IP68

		Small	Normal	Large
△	A Category	700	1000	1250
○	B Category	650	850	1050
□	C Category	500	700	900

All sizes and formats:

Contact us 📱 ✉

Qualified & sorted LEDs
(High intensity & high efficiency)

- High luminous efficiency.
- Reduced consumption.
- Lifespan +50%.

Options

Speed or presence detection radar, timer etc.
Adapt equipment to meet your requirements, options on pages 62 and 63

CERTIFIÉ PAR **ASCQUER**

NF

Advantages :

- **Thanks to their NF058 certification, our panels replace their non-reinforced equivalents.**

- **Low-thickness box (5 cm) in the shape of the sign.**

- **No savings on the number of LEDs.**
  Border formed of 2 rows of LEDs.
  The symbol is enhanced as standard by LEDs.

- **3M certified class 2 film.**

- **Optional extras may be added at any time.**

- **High output 5 mm LEDs.**

- **Less and simpler maintenance required.**

- **No more rivets, only the message on the front.**

- **Visible: Prevents familiarisation effects.**

- **Reliable: Operational life in excess of 100,000 hours.**

NEW

Power Supply 230 V PPRF BTR

38312	Power supply 230 V double flash mode
	For PPRF BTR

Power supplies

To power your equipment see the various power supplies available on pages 64 and 65.

Dynamic Enhanced Signaling

1 panel 1 symbol

Flashing mode

1 panel 2 symbols

Alternating Operating mode

We ensure that the information displayed to road users if the most accurate, while optimizing visual impact thanks to a continuous alternance of symbols.

Symbol sign	Dimensions (mm)	△ and/or	○ and/or	☐	Text
☐	700 x 700	700	650	700	-
☐	900 x 900	1000	850	900	-
☐	700 x 900	700	650	700	1 line (8 letters)
☐	900 x 1150	700	650	700	2 lines (2 x 8 letters)
☐	900 x 1150	1000	850	900	1 line (8 letters)
▭	700 x 350	-	-	-	2 lines

All sizes and formats:

Contact us 📱 ✉

PPDY BTR Range

The Dynamic sign (PPDY) in the BTR range, has a low thickness and is made up of two aluminium signs with folded dropped edges, assembled using an elastomer seal.

Front finish: Polyester powder powder coating, black color RAL 9005.

Rear surface finish: Polyester powder powder coating, silver gray color RAL 9006.

It is equipped with 3 m of cable.
Rear fixing using double rail.

The symbol is outlined with red LEDs on the outside and yellow LEDs on the inside.

The lifetime of a LED is greater than 100 000 hours.
Red and yellow LEDs are connected in networks of 5 LEDs, ensuring continuous operation of the lighting element.

The panel must be connected to a power source: 230 V, on public lighting, or solar.

This type of sign can be manufactured with the road symbol of your choice, and can be supplied with 2 alternating symbols.

Flash mode operation.

Options

Speed or presence detection radar, timer etc.
Adapt equipment to meet your requirements, options on pages 62 and 63

Advantages :

electronic
IP68

Thin box (5 cm).

Designed to offer better integration in urban environments.
The listel and the symbol are materialized by high brightness
LEDs on a matt black background.

Single or double symbols.

This type of sign is entirely adaptable to your needs.
Up to 2 alternating symbols of your choice.

Superior visual impact

The reinforcement of the symbol by LEDs, and its square /
rectangular shape on a black background allow for a better
visual impact of the symbol.

No more rivets, only the message on the front.

NEW

Qualified & sorted LEDs (High intensity & high efficiency)

- High luminous efficiency.
- Reduced consumption.
- Lifespan +50%.

Power Supply 230 V PPDY BTR

42581	Power supply 230 V flashing mode for PPDY BTR

Power supplies
*To power your equipment see the various
power supplies available on pages 64 and 65.*

Permanent Signal Options

Command Options
Radio remote control
Remote control box
Call push button
GSM/SMS

Détections Options
Motion detection radar
Radar regulation
Radar speed detection
Magnetic loop detector
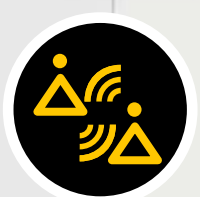
Clock Options
Weekly
Annual

Power Supply Options
Battery, Solar, 230 V,
Public Lighting Source

Software Development Options
Non-standard cycles
Customized function...

Synchronization Options
Radio synchronization, GPS

Options

Tell us your requirement, we have the solution !

N°1 in terms of Modular design
Options for creating special signals
Contact us

Some examples of specific configurations :

Options
Speed Detection Radar

Radar detects an approaching vehicle. Detection of excessive speed triggers operation of the sign.

Common application : Urban area entrance.

Options
Remote control start-up

Operation of the sign is initiated manually using a remote control. This system results in optimum impact of the sign when it is of greatest use.

Common application : School areas.

Options
Securing pedestrian crossings

Activation of the pedestrian control initiates the illuminated enhancement on both signs.
Pedestrians are therefore safe to move, safe in both directions of traffic.

Radars

Speed detection radar

35485	Low power consumption radar 230 V Max range 80 m
24221	Low power consumption radar 12 V Max range 80 m

Movement Detection Radar

29395	Movement Detection Radar 12 V Max range 40 m
36391	Movement Detection Radar 230 V Max range 40 m

Clocks

22018	Weekly NFC timer 230 V
445	Weekly NFC timer 12 V
On quotation *(to be adapted to the power supply)*	Annual timer + programming kit

Options
Height sensor

A profile detector is positioned on the side of the road, upstream of the sign. If the height limit is reached, the light reinforcement on the profile indication panel is activated

Common application : Tunnel.

We have been adapting our illuminated signals to meet your specific needs for 25 years

Our design bureau monitors the latest technological developments daily so that we can create the best signal systems to meet your requirements.

Alternative power supply solutions

No heavy civil engineering, no administrative procedures, no meter connection fees, and more respect for the environment.

eco-efficient

Supply Using Public Lighting

The SEP power supply is a box for charging at night (when public lighting is active) the battery which powers the equipment 24 hours a day.

34577	Public Lighting Source Box 15 W 7 Ah - 12 V Rechargeable battery included
1694	Public Lighting Source Box 60 W 17 Ah - 12 V Rechargeable battery included
1695	Public Lighting Source Box 60 W 34 Ah - 12 V Rechargeable battery included

Differential Circuit Breaker

| 3117 | 30 mA differential circuit breaker |
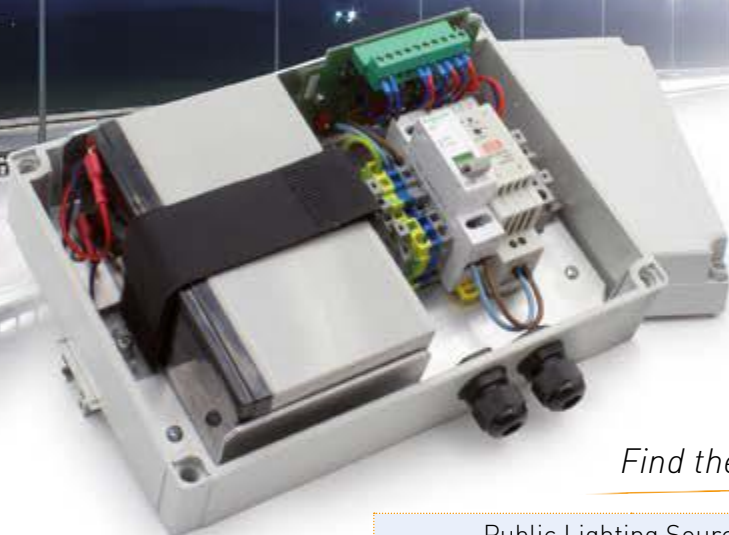
Find the right power supply for your product :

Public Lighting Source Power (for a lighting time of 7 hours per night*)			
Standard	Weekly clock**	Speed radar	Motion radar
Permanent optics			
Biflash kit 130/30 (réf.35837)	7 Ah (réf. 34577)		
Optic 200/80 (réf.1660)			
Optic 300/225 (réf. 3156)			
Enhanced Signaling			
Triangle 700	7 Ah (réf. 34577)		
Triangle 1000			
Rond 650			
Rond 850			
C20 500			
C20 700			
C20 900			
Dynamic Enhanced Signaling			
Contact us			

* **Please note** that some municipalities, in order to save energy, turn off public lighting for several hours at night. In this case the SEP sizing must be the subject of a specific study.

** Operation 4 hours per day.

Solar Power Supply (photovoltaic)

The solar panel is used to charge a battery which powers the equipment 24h/24. The solar power kit includes the solar panel and the rechargeable battery housing.

35637	Solar Power Kit 10 W 7 Ah Battery supplied
23278	Solar Power Kit 0 W 17 Ah Battery supplied
28616	Solar Power Kit 40 W 34 Ah Battery supplied
28664	Solar Power Kit 60 W 60 Ah Battery supplied
32692	Solar Power Kit 100 W 60 Ah Battery supplied
48101	Solar Power Kit 120 W 60 Ah Battery supplied
33402	Solar Power Kit 165 W 120 Ah Battery supplied
47909	Solar Power Kit 200 W 120 Ah Battery supplied

The golden rules for setting up :
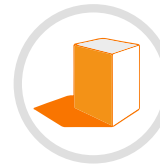
SOUTH FACING   **CLEAR ORIENTATION**   **NOT EXPOSED TO FOULING**   **CLEANED TWICE PER YEAR**

Find the right power supply for your product :

	Solar power supply			
	Standard	Weekly clock*	Speed radar	Motion radar
Permanent optics				
kit Biflash 130/30 (réf.35837)	10 W 7 Ah (réf. 35637)		10 W 7 Ah (réf. 35637)	20 W 17 Ah (réf. 23278)
Optique 200/80 (réf.1660)				
Optique 300/225 (réf. 3156)	20 W 17 Ah (réf. 23278)	10 W 7 Ah (réf. 35637)	20 W 17 Ah (réf. 23278)	
Enhanced Signaling				
Triangle 700	20 W 17 Ah (réf. 23278)	10 W 7 Ah (réf. 35637)	20 W 17 Ah (réf. 23278)	20 W 17 Ah (réf. 23278)
Triangle 1000				
Rond 650				
Rond 850				
C20 500	10 W 7 Ah (réf. 35637)		10 W 7 Ah (réf. 35637)	
C20 700				
C20 900	20 W 17 Ah (réf. 23278)		20 W 17 Ah (réf. 23278)	
Dynamic Enhanced Signaling				
Contact us				

* Operation 4 hours per day.

Limit road abuses and encourage good behaviour on sensitive routes

PERMANENT
230V

CEREMA CERTIFICATION

TEMPORARY
Solar or Public Lighting

NF ASCQUER CERTIFICATION

MOBILE
Rechargeable battery

NF ASCQUER CERTIFICATION

SPEED RESPECTED = GREEN LIGHT

Green-Reward Traffic Lights

Includes: a Ø 200 three-colour traffic light, a radar, a control cabinet, a power supply, a mast with accessories.

PERMANENT 230 V :

54865	Green-reward traffic lights 230 V

TEMPORARY Using Public Lighting:

32406	Green-reward traffic lights - using public lighting

TEMPORARY Solar power

32407	Green-reward traffic lights - solar power

MOBILE version :

This model uses the operating principle of the green-reward traffic lights: autonomous and delivered ready to use* !

Ideal for :

Events	Site	School security	Implementation study

38512	Green-reward mobile traffic lights Battery operation*
37744	KC700 Class 1 panel «SPEED RESPECTED = GREEN LIGHT»

* (battery not included)

Configure your equipment.
Contact us 📱 ✉

SPEED RESPECTED = GREEN LIGHT

Repeater, information panel, red cross optics, loop detector…

Implementation rules :

- **Only in urban areas**
- **Speed threshold : 30Km/h or 50Km/h**
- **main road section**
- **Excluding Intersection**
- **Excluding pedestrian crossing**
- **Excluding town entrance sign**
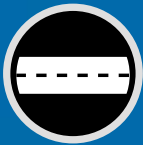
SPEED RESPECTED = GREEN LIGHT

Watch the video

How it works ?

When stationary, the traffic light is red.
It turns green when a vehicle approaches the authorized speed.

And where there is a pedestrian crossing

Facilitate the flow of traffic while favoring pedestrians.

Approaching vehicle detected: the light turns green if there is no pedestrian.

Micro-Regulated Traffic Lights Pedestrian Crossing

Motion detection: the light turns green

This device makes a pedestrian crossing safer and slows down approaching vehicles.
When idle, the lights are red, they turn green when a vehicle is detected nearby.
Includes: two Ø 200 three-colour traffic light, two Ø 100 three-colour traffic light, two pedestrian call blocks, two pedestrian figurines, two radars, a control cabinet, two masts.

25009	230 V micro-regulated traffic lights with pedestrian crossing

Radar Speed Sign

EASY

simple & compact

43415

45801

Easy Radar Speed Sign

Display of the speed detected in "fixed" mode, by two 250 mm characters with red and green LEDs.
Possible display of speeds from 1 to 99 km/h.
Front face protected by polycarbonate.
Rear fixing by rails for masts of maximum Ø140 mm (clamps not supplied).
Dimensions: 425 x 380 x 127 mm.

The panel can be powered by 230 V, public lighting or solar power.

43415	Radar speed sign 2H250 12V Easy LEDs Red/Green - box 425 x 380 x 127 mm

43662	Radar speed sign Easy option 230 V power supply

43663	Radar speed sign Easy option using public lighting Battery included
43665	Solar kit 40 W 34 Ah frozen mode Battery included

45801	Mobile box option

9317	Mobile box option with reinforcement feet

For any other need for educational radar panels with options (data collection, matrix text, etc.)

Contact us 📱📧

The Short Stop Terminal is **the ideal solution** for the management of limited-time parking places.

- **Supports local businesses.**
- **Perfectly identified.**
- **Very visible due to its big size.**
- **Simple installation without significant civil engineering.**
- **In the colors of your city.**

TTS Short Stop Terminal

This device allows a large number of vehicles «rotation»on the same parking place. Short stop terminals contribute to reduce the traffic of vehicles searching for a place, which also reduces noise and pollution.

Our terminals authorize the parking for a limited time, ranging from 10 to 40 minutes.

They can be with or without count down time, manage a simple or a double place, and function on 230 V ou public lighting system.

These terminals can be equipped with an optional clock, or with an «SMS sending» option (after the authorized parking times is exceeded).

Our minute short stop terminals are customized with the logo, the text and the town chosen colors.

The **detection and management system** does not require complex programming. With a single setting requiring no adjustments, the desired parking time is easily set either in the factory or by the client themselves.

Our short stop terminal is equipped with the latest design of electromagnetic detector.

Voltage	Number of places	With time count-down	Single-sided	Reference
230 V	1	No		23372
230 V	2	No		38336
230 V	1	Yes		31330
230 V	2	Yes		31331
12 V*	1	No	Yes	24458
12 V*	2	No		36124
12 V*	1	Yes		40932
12 V*	2	Yes		40933

* It is necessary to add the adequate power supply to the terminal.

Standard version or with count down

Single or double places

Optional

4G SMS EMAIL

Our minute stop terminals can be integrated into our Smart City parking supervision solutions.

Traffic Control Lights

→ **1706**

→ **2330**

→ **15856**

→ **30915**
Bicolor optic

→ **1678**   → **1677**

→ **24718**
Double Symbol

Eclipse

→ **1707**

Traffic Control Lights Ø 200

Polycarbonate assembly equipped with 2 optics Ø 200 mm : one red, one green.

Crossing traffic light - LEDs light :

1706	Crossing traffic light Ø 200 LEDs 12 V
2329	Crossing traffic light Ø 200 LEDs 230 V

Crossing traffic light - E27 Light bulb :

2331	Crossing traffic light Ø 200 - E27 Light bulb 12 V
2330	Crossing traffic light Ø 200 - E27 Light bulb 230 V
38525	E27 Light bulb LEDs 230 V

Traffic Control Lights Ø 100

Polycarbonate assembly equipped with 2 optics of diameter 100 mm: one red, one green. LED light source, E27 230V bulb. Fixing system using inserts.

42531	Crossing traffic light Ø 100 LEDs 12 V
15856	Crossing traffic light Ø 100 LEDs 230 V

Specifics Crossing Traffic Lights

Bicolor crossing traffic light :
ABS optic Ø 210 mm. Optic built of 80 red LEDs and 81 green LEDs.

33950	Bicolor optic Ø 210/12 V Red / Green
30915	Bicolor optic Ø 210/230 V Red / Green

Red cross / green arrow :
ABS optic Ø 210 mm. Cross built of 53 red LEDs. Arrow built of 60 green LEDs.

37679	Optic Ø 210/12 V Red cross / Green arrow
24718	Optic Ø 210/230 V Red cross / Green arrow
1678	Optic Ø 210/230 V Red cross
1677	Optic Ø 210/230 V Green arrow

Road Island Edge Warning Lights

The rows of LEDs on the circumference operate as fixed locating lights. The central part operates as a flashing light during bad weather.
Bowl Ø 250 mm made of grey-painted aluminium, IP55. 300 yellow LEDs arranged in 2 parts (crown ring and central part)

1707	Eclipse lights

GENERAL SALES CONDITIONS

Section 1 - General points
The present sales conditions apply to all our sales except for public contracts and sales to local authorities, which, due to their nature or measures that are in force, are the subject of specific conditions

Section 2 - Orders
All orders must be confirmed in writing (letter, email or fax). Confirmed orders cannot be subsequently modified. Any later modification will be invoiced as an addition. Duly recorded orders can only be cancelled with our written agreement.

Section 3 - Prices - Lead-times and delivery
• Our reference prices are set each year in our catalogue.
• Our lead-times are given for indication only. Delays which might occur will not give rise to any indemnity on our part, nor will they be the motive to refuse goods.
• Unless otherwise stated, our tariffs are excluding departure taxes, packaging and transport
invoiced as additions. Goods are dispatched in accordance with the standard conditions of the transport service providers. Urgent or special deliveries are to be the subject of a specific agreement and the purchaser will be invoiced for these as an additional service.
• Our goods, even those dispatched «free», whether delivered by ourselves or third parties, always travel at the risk and peril of the receiving party to whom they belong. In the event of apparent defects or missing items, make all necessary observations, check the consignments on arrival and if necessary take recourse against the transport service provider who alone has responsibility.
• As a result, the consignee must, at the time of acceptance, check the products and formulate precisely on the carrier's voucher any defects or deficiencies found and, if necessary, refuse the goods.
Any unspecified reserves such as «Subject to unpacking, damaged boxes, or damaged goods» will not be accepted.
The recipient must also confirm by registered mail these reservations to the carrier no later than 48 business hours after receipt of the goods, and send a copy of this letter to: Traffic Technologie Système, Quality Department, ZI 1 avenue 2ème Rue BP594 06516 Carros Cedex, recalling the references on the delivery note.

Section 4 - Conditions for settlement
• For all our «account» client, the payment deadlines are set at 45 days from the invoicing date.
• No discount for early payment.
• During the completion of an order or contract, we reserve the right to demand any guarantee of payment in the event of new information about the situation of our client being brought to our attention (non-payment by due date to ourselves or to a third party, negative opinion following an examination of financial documentation etc.).
• All sales to clients without an account with us are payable with the order.
• Catalog prices are exclusive of Eco-Participation.

Section 5 - Penalties
• Late payment interest equal to the official lending rate plus 7 points will be applied as a penalty once the due payment date has passed. This will apply to the full amount remaining due.
• In the event of failure to pay on one or more of the due instalments, bills of exchange, promissory notes, the other instalments will become immediately payable, even if they have given rise to bills of exchange.
• One-off indemnity for recovery costs 40 € (ART D441-5 of the French Commercial Code).

Section 6 - Warranty
• Before installation or use, the delivered product must be stored in their original packaging under cover, protected from water or humidity, corrosive products, excessive heat or cold temperatures.
• Our clients expressly agree to scrupulously follow the advice for use provided for each type of product in our catalogue. We will not accept any responsibility and will not implement any warranty in the event of the advice for use not being followed.
• The warranty commences on the day of delivery. Equipment must be returned carriage paid, with all references relating to the fault as well as the invoice number. The re-dispatch of equipment after repair is made carriage-paid for equipment under warranty. The warranty ceases to be applicable if the equipment has undergone any non-authorised intervention, or if elements disturb the normal operation of the equipment.
• The standard warranty is for 12 months.
• Our warranty is strictly limited to the replacement of equipment deemed to be defective.

Section 7 - Retention of title
• Products are sold with retention of title.
• The seller retains title to the products until the payment of the purchase price made effectively and in full by the purchaser.
In the event of default of payment at the due date, the seller may reclaim the products and cancel the sale. Cheques and bills of exchange are only considered to be payments once they have been effectively
deposited. Until that time the retention of title clause is to apply in full. These arrangements are not to be an obstacle to the transfer, on delivery, of the risk to the products that are sold. The purchaser agrees not to transform or incorporate the said products or re-sell them, or use them as collateral, until the purchase price is paid in full, on pain of immediate reclamation of the products by the seller.

Section 8 - Derogations
No derogation to the general sales conditions may be made without written confirmation on our company's headed paper.

Section 9 - Disputes
All disputes relating to our sales, even in the case of warranty related claims or multiple defendants, are to come under the exclusive competence of the French Commercial Court within whose jurisdiction the registered office of Trafic Technologie System falls.

Section 10 - EEE
The unique identifier FR025658_05T0SA attesting to registration in the register of producers in the EEE sector, in accordance with section L.541-10-13 of the Environmental Code, has been awarded by the ADEME to the company TTS (Siret: 398 379 214 00065). This identifier certifies its conformity with regard to its registration requirement in the register of producers of Electrical and Electronic Equipment and the declaration of its product market launch to ecosystem.

Other Activites

Intelligent Transport Systems

Parking Systems Signalling

Digital Display Systems

TTS

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