



Temporary,  
On-board &  
Permanent  
Signals



2026

ILLUMINATED SIGNALS

ROADWORKS

VEHICLE

ON-BOARD

PERMANENT

# Your contacts illuminated signals :

our team answers your daily inquiries: **+33 4 92 08 29 99**

## *Quotes, Orders:*



**Contact commercial**  
Sales Assistant  
[contact.step@ttsys.fr](mailto:contact.step@ttsys.fr)

## *Specific Requests:*



**Maxime DASPRE**  
Technical Sales Representative  
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## *After-Sales :*



**Valentin MINIERE**  
After-Sales Services  
[v.miniere@ttsys.fr](mailto:v.miniere@ttsys.fr)



## The world changes, TTS innovates



**Yannick CHIAVELLI**  
Chief Executive Officer

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 workshops in France.



**Made in France**





## 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.

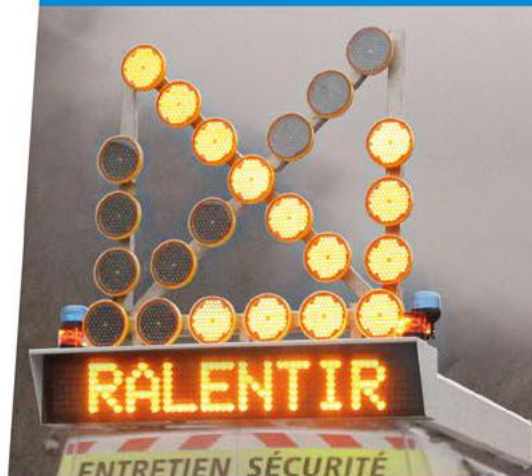
A part of our commitment is to be a responsible player and in order to meet this legal obligation, we have registered with Ecosystem as an EEE producer, so that our customers can benefit from a free collection and recycling service for our end-of life products. Catalogue prices exclude Eco Participation.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



**ROADWORKS** P 6-23



**VEHICLES** P 24-39



**ON-BOARD** P 40-53



**PERMANENT** P 54-70



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



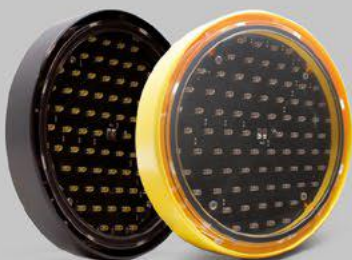


Our range of optics to suit all configurations...



### 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 LEDs version is protected by a lens.

## ■ New 2 batteries case New design

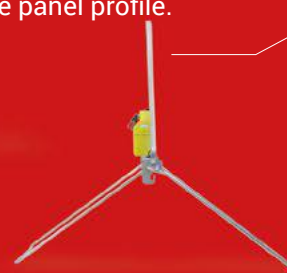
+ compact  
+ resistant

The case profile protects the connectors.



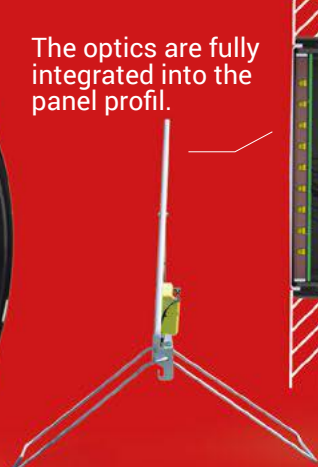
## ■ New optic Ø 70 mm for triangle 700 ultra-thin (12 mm)

The optic is fully integrated into the panel profile.



## ■ New optic Ø 130 mm ultra-thin (25 mm) + resistente

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

Tempo mobile traffic light range ■ p. 8 - 15

Illuminated sign equipment ■ p. 16 - 17

Traffic guidance ■ p. 18 - 19

Site lighting ■ p. 20

Work on site equipments ■ p. 21

Power supplies ■ p. 22 - 23



**TRAFFIC LIGHTS** P 8-13



**ILLUMINATED SIGN  
EQUIPMENT** P 16-17



**TRAFFIC GUIDANCE** P 18-19



**WORKS ON SITE EQUIPMENTS** P 21

# Tempo Mobile Traffic Light

# tempo

THE MARKET  
BENCHMARK



IK10

IP55



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 market



Choice of optional box



# Tempo Mobile Traffic Light

## TEMPO range : Specialist's expertise result !

**tempo**  
**STANDARD**  
page 10



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

**tempo**   
**SOLAR**  
page 12



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

**tempo**   
**RÉGULATION**  
page 13



**tempo**   
**OPTIONS**  
page 14-15



### 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 branches junction. It supports the management of cross-cycles and changeover cycles on green.



↔ Alternating



↔ 3 branches junction



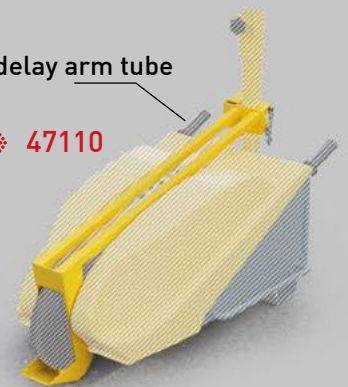
↔ 4 branches junction

### Specific protection solutions

more details page 10

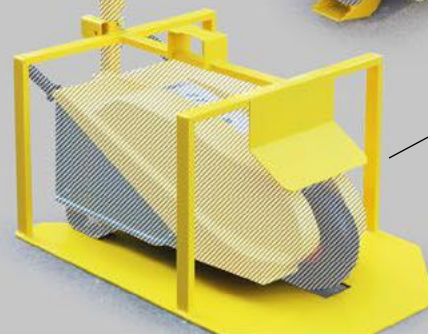
Theft delay arm tube

↔ 47110



Protection cage

↔ 41186



## Tempo Mobile Traffic Light



ASCQUER CERTIFICATION  
Admission n° : KR11 01  
[www.ascquer.fr](http://www.ascquer.fr)

# tempo STANDARD

## 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

### Battery 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

### Supply Using Public Lighting Source:

59520

Power supply 60 W 34 Ah  
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



**Sent within  
48 hours !**

**3758**  
Mast cap

**3754**  
Optics support  
mast

**1513**  
Black dome casing

**58465**  
Red LED  
electronics

**1171**  
Ø 210 seal

**3755**  
Upper mast

**1509**  
Red LED  
Optic

**1510**  
Yellow LED  
Optic

**22561**  
Complete  
Tempo module

**3756**  
Lower mast

**22562**  
Complete  
Tempo Mast

**22377**  
Battery casing

**22372**  
Painted casing

From 2018 :

**44426**  
Connection box

Before 2018 :

**21753**  
Connection box

**58475**  
Yellow LED  
electronics

**58476**  
Green LED  
electronics

**40929**  
Tempo  
electronics

**1514**  
Yellow dome casing

**1120**  
M10 x 30 Stainless  
Steel Knob

**14334**  
Plastic  
sleeve

**13524**  
Casing handle  
(without sleeve)

**886**  
Polycarbonate  
lens Ø 210

**42218**  
Decorated front  
face lens

**22558**  
Tempo remote  
control

**22383**  
Casing cover

## 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

## Tempo Solar Specific Spare Parts

**tempo  
SOLAR**

**42359**  
Solar panel  
12 V 20 W

**31125**  
Solar housing cover  
12 V 20 W

**1164**  
Tempo Solar  
wheel

**31036**  
Solar battery holder  
case 12 V 20 W

**31119**  
Charge  
regulator

## Steel Metal Options

**43753**  
OPTIMO  
battery casing

**44429**  
Casing cover Partial  
opening before  
October 2019

**49678**  
Casing cover Total  
opening from  
October 2019

**27645**  
Wheel axle

**22833**  
Right cover tab

**22385**  
unpuncturable  
wheel

**22832**  
Left cover tab

**27646**  
Wheel spacer

**27647**  
Elastic washer  
with cap

# Solar Tempo Mobile Traffic Lights

**Intertraffic**  
INNOVATION AWARD



**Reinforced impact protection**  
with polycarbonate  
and steel casing.



**tempo**   
**SOLAR**

*eco-efficient*



## Tempo changes to Green !

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

## Unrivalled 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.

## 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.



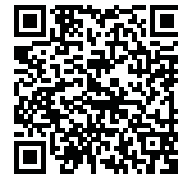
# Traffic Regulation Tempo Mobile Traffic Light

**NEW**
*Even more effective!*

tempo  **RÉGULATION** **v2**

**It automatically regulates traffic**

**→ priority to the most congested axis**



**Discover how**

Watch the video

## Traffic 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 **handling 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.



Less pollution.  
Less energy consumed.



# Tempo Mobile Traffic Lights - Options



## 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...

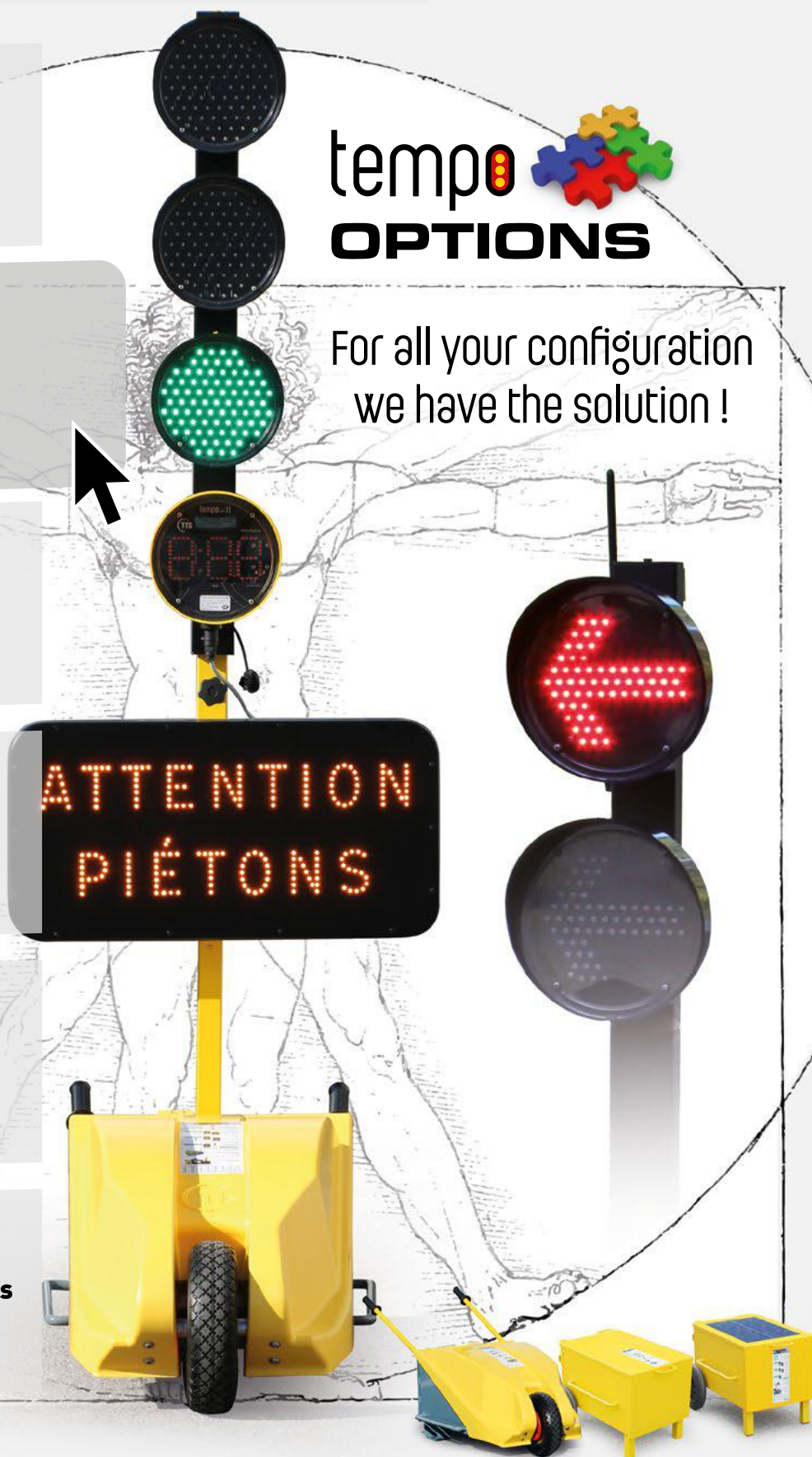


## Power Supply Options

Battery, Solar, 230 V,  
Public Lighting Source

tempo   
**OPTIONS**

For all your configuration  
we have the solution !



**N°1 on Modularity**

Options to match every site configuration.

**Contact us**  



# Tempo Mobile Traffic Lights - Options

Some examples of specific configurations :

tempo  
OPTIONS

Exit from site  
priority



Watch the video

tempo  
OPTIONS

Manual remote -  
controlled alternate  
Independent



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*

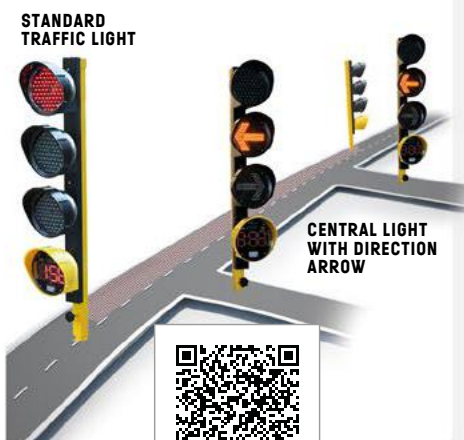


Watch the video

tempo  
OPTIONS

Intermediate  
arrows traffic  
light

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



Watch the video

**NEW**

tempo  
OPTIONS

Check the  
battery  
via SMS

**Check & get alerts**

- Monitor the voltage remotely via SMS
- Get notified when voltage is low

**Compatible with any existing Tempo!**



**For 20 years we've been ensuring that our lights meet your specific requirements.**

...we have been entrusted 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

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

 Triangle 1000
Other symbols :  
contact us.

## Tri-flash set autonomy \* :

Optic	2 Batteries case		4 Batteries case		Battery 75 Ah
	7 Ah	45 Ah	7 Ah	45 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

## 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-batteries case (type 4R25) :

**58800** Triangle 700 Ø 70/12 LEDs - classe 2  
2-batteries case (batteries not included)

**17836** Triangle 1000 Ø 130/30 LEDs - classe 2  
2-batteries 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

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

 16891

 22279

 29815

## Lighting kit

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

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

**15702** 3 optics Ø 130mm/30 LEDs set  
2-batteries 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)

## Options

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

**29815** option 3 clamps for universal mounting.

### Jack lead extension :

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

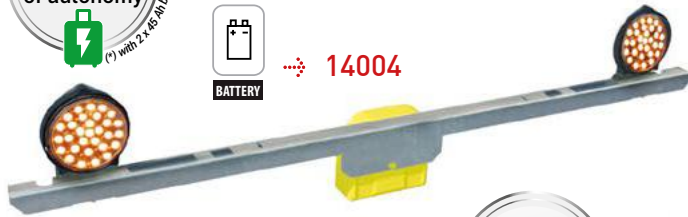


# Illuminated Sign Equipment

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



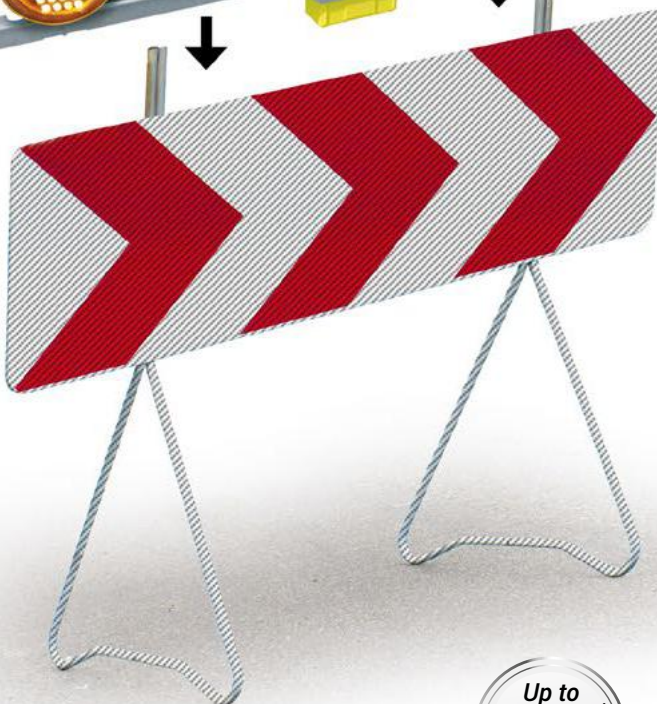
14004



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



1532



4 batteries case option

57270

**NEW**

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



55236

2 batteries case option

16893



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



16891



## Bi-flash set autonomy \* :

Optic	2 Batteries case		4 Batteries case		Battery
	7 Ah	45 Ah	7 Ah	45 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-batteries case (type 4R25) :

14004

Fast-fit bar bi-flash optic Ø 130-30  
2-batteries case (batteries not included)

1532

Fast-fit bar bi-flash optic Ø 200-80  
2-batteries 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)

## 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 batteries case power supply (4R25 type) :

26906

bi flash optics Ø 130mm/30 LEDs set  
2-batteries case (batteries not included)

16893

bi flash optics Ø 200mm/80 LEDs set  
2-batteries 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)



## Traffic Guidance



→ 1547



→ 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

## Accessories

## XLR extension :

12018

XLR extension - 16 m

40291

XLR extension - 25 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



→ 12018



→ 1556



→ 45801



→ 41186



→ 47110





## Traffic Guidance

## Exclusive :

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

*This method helps to guide drivers !*



## 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:

- 125 mm matrix display, for up to 12 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  
H125 matrix. 12 characters

## Site Lighting

Up to  
2 months\*  
of autonomy

(\*) with a 45 Ah battery



BATTERY

→ 1535



*Practical: with their anti-theft mount, our lights also fit on a traffic cone!*

Up to  
2 months\*  
of autonomy

(\*) with a 45 Ah battery



BATTERY

→ 14386



## 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-batteries 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

## 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-batteries 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

**Anti-theft mounting kit:**

34393

Anti-theft mounting kit



→ 34393





## Work On Site Equipments

### 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



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

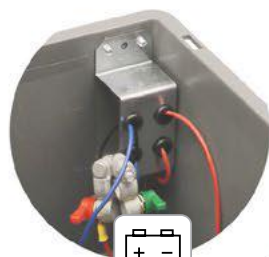


❖ 30107

High Strength



# Power Supplies



→ 1555

**NEW**

*Even more robust!*



→ 21551



→ 26758



## 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

## 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
------	--------------------

## 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/égalisation - FLOATING/maintenance. These three curves are applied automatically in turn.

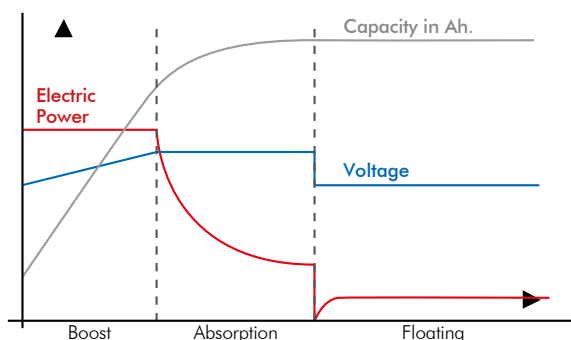
Our battery chargers provide high quality charge regulation which guarantees protection and a long battery operating life.

### 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
-------	------------------------------------







ROADWORKS

SIGNALING

## Power Supplies



→ 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



→ 15700



→ 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

Available with battery option → 56355

### 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

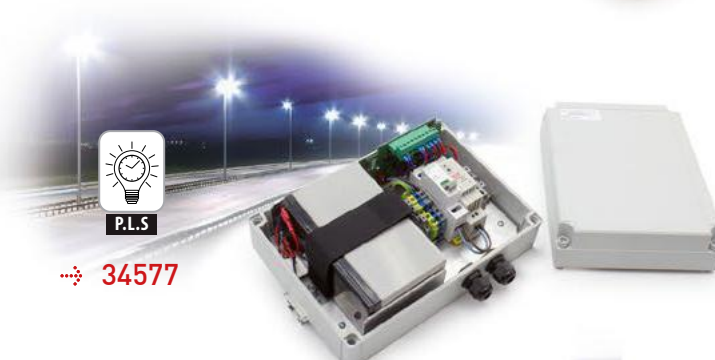
1694

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
Searchlights & work lights	p. 27
Rotating beacons	p. 28 - 29
Light Heads	p. 28
Mini lightbars	p. 29
Lightbars	p. 30 - 31
Scrolling lightbars	p. 32
Directional light arrows	p. 33
Light triangle ■	p. 34
The Integral Classic ■	p. 35
The streamlined Integral Classic ■	p. 36 - 37
Fittings ■	p. 38
Vehicle screen printing ■	p. 39



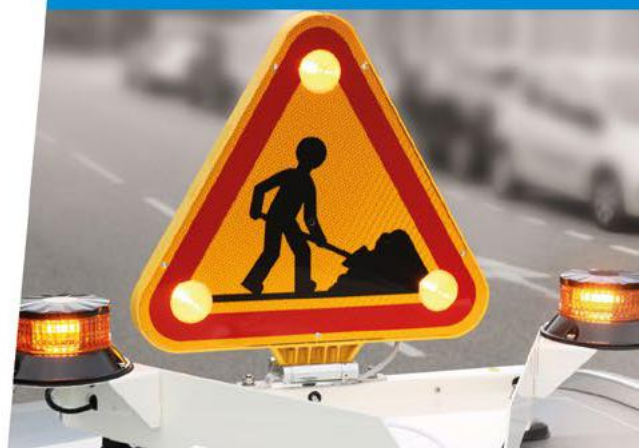
**CONTROL PANELS** P 26



**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.

<b>30216</b>	1 Switch pack Supplied with base and set of pictograms
<b>30217</b>	2 Switch pack Supplied with base and set of pictograms
<b>30218</b>	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



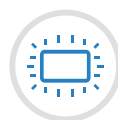
BUS single  
cable only



Quick  
setup



Adjustable  
stand



LED  
backlight



No  
relays



Pictograms  
collection



➔ **37852**



➔ **55754**

### Sound Management Modules

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



## Search Lights

27

## 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

Voltage	Power	Brightness	Work lights	Magnetic fixing kits
			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



➡ 35785



➡ 35785

## Wireless beacon

➡ 52547



## 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	<b>35785</b>
			Blue	contact us
		Flash	Amber	<b>23391</b>
			Blue	contact us
	Tube	Rotating	Amber	<b>23392</b>
			Blue	contact us
		Flash	Amber	<b>23393</b>
			Blue	<b>24058</b>
	Magnetic	Rotating	Amber	contact us
			Blue	
		Flash	Amber	
			Blue	

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



➡ 43398

➡ 21149



Ultra thin

## 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



Bicolor LED



Bicolor - amber / blue

➡ 43397



# ACCESS Range

## Optimized to meet the essentials

➔ 30302

➔ 30634

➔ 34855

### ACCESS Range

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

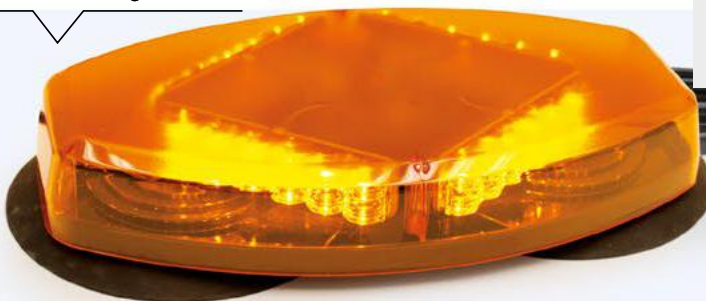
ACCES range blue : contact us

### Connection Tube

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



### Multimode lightbar



### Mini Lightbars

2 buttons:  
on-off / mode selection

➔ 36593



### 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)



➔ 36294

## Lightbars

HOMOLOGATION  
R10HOMOLOGATION  
R65

## LEDs Lightbars



→ 35594



→ 35604

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

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



→ 35597



→ 35603

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

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**  







→ 39953

### Standard Flat Lightbars : EPSILON

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



Bicolore LED

**2 in 1 : scrolling & illuminated ramp**



→ 39954

**N°1 on modularity**  
Options to fit your needs

**Contact us**  



### Special Flat Lightbars

**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 functioning 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 front 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

## Scrolling Lightbar



### Scrolling Lightbar

**2 in 1 : a scrolling bar** at the rear of the vehicle, **a lightbar** on the front 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



➡ **27473**

**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)**



# Lighted Directional Traffic Arrows

33

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

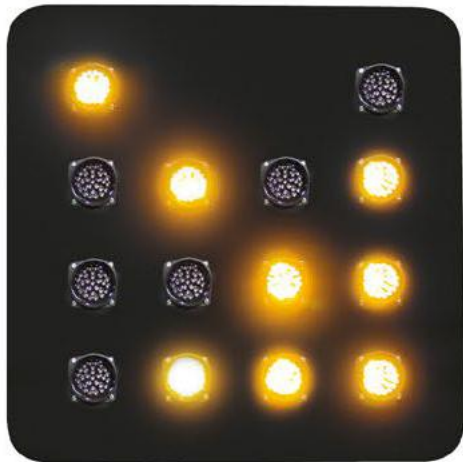
**Control panel is not included** (to be select page 26) :  
The arrows can be controlled by the 2 switch pack (reference 30217, not included).  
Contact us when a complete solution is required, with added triangles and rotating lights.

## Lighted Directional Traffic Arrows (16 optics)

**Blinking arrow (1000x400x50 mm), 16 lights Ø 70 :**  
Arrow with low consumption LEDs, single sided.

38789

LEDs blinking arrow



→ 1585



→ 38789

## Lighted Directional Traffic Arrows (14 optics)

**Blinking arrow (720x720x50 mm), 14 lights Ø 70 :**  
Arrow with low consumption LEDs, single sided.

1585

LEDs blinking arrow



→ 1585

## 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

**NEW**

## Optimized for the essentials



LEDs protected by polycarbonate lense



High light intense



High impact resistances



Low consumption



➡ 56358

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

### 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

### 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



➡ 1567



➡ 1576



Create your own **Intégral™**  
or select a standard configuration :



## 2 Elements Configuration

### Pre-equipped assembly including :

1 roof rack.  
1 amber LEDs beacons.  
1 LEDs triangle 500 mm or 700 mm.

<b>1956</b>	Configuration n°2 Triangle 500 class 2
<b>1957</b>	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.

<b>1958</b>	Configuration n°4 Triangle 500 class 2
<b>1959</b>	Configuration n°5 Triangle 700 class 2

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

## Options **Intégral™** Classic

### Manual folding kit :

<b>1576</b>	Manual folding kit
-------------	--------------------

### 8 lights LEDs scrolling lightbar :

<b>37866</b>	8 lights LEDs scrolling lightbar (control panel ref 43385 not included)
--------------	--

→ **1956 Triangle 500**



→ **1959 Triangle 700**



→ **35341**



→ **37866**

# Intégral™ Streamlined Classic



➔ 29112



➔ 29963

## 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

### 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

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



## Options



Create your own **Intégral™**

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



## 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



→ 38410

Universal adhesive system



→ 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 / VW 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

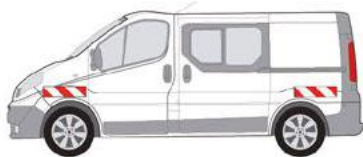
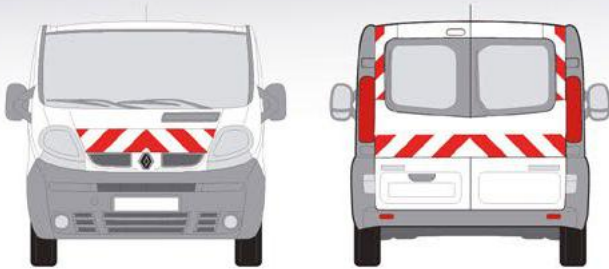
Standard gutter-system roof-rack



# Vehicle Screen Printing

39

*A cut perfectly adapted to the vehicle*



Minimum lateral



Maximum lateral



→ 1972

→ 1973



→ 12866

**Order of 6 November 1992 published in the journal officiel of 3 January 1993**

**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 m<sup>2</sup>.

**Front :** 0,16 m<sup>2</sup> - **Rear :** 0,32 m<sup>2</sup>.

**Right side +left side :** 0,32 m<sup>2</sup>.

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

## Magnetic Strip

1972

Magnetic «service» strip Class 1

50x15 cm

1973

Magnetic «service» strip Class 2

50x15 cm

## 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'

**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

General description ■ p. 42

Control panels ■ p. 43

On-board range ■ p. 44 - 47

FLR trailers ■ p. 48 - 49

VMS trailers ■ p. 50 - 51

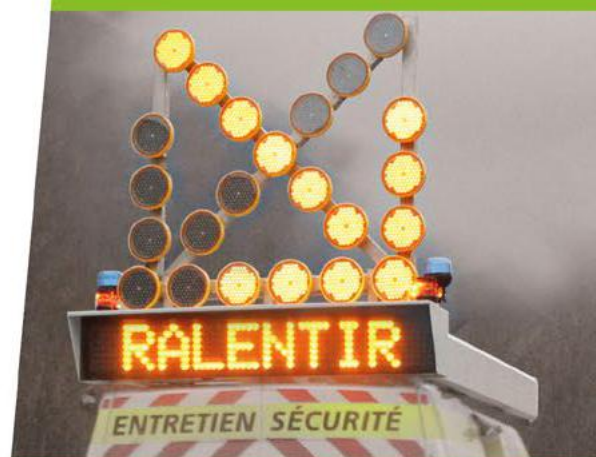
Pictogram trailers ■ p. 52 - 53



CONTROL PANELS P 43



ON-BOARD RANGE P 44 - 47



EMERGENCY LIGHT ARROW P 47



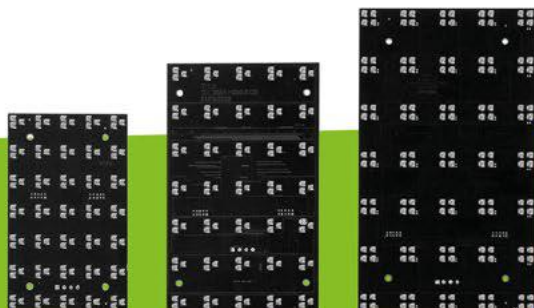
TRAILERS P 48 - 53

## General Description



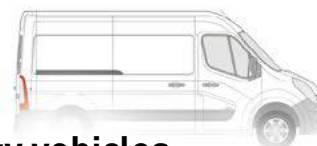
### VMS for light utility vehicles

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**.



**CE certified to EN12966 standard**

Visit the site : [www.ascquer.fr](http://www.ascquer.fr)



### VMS for heavy duty vehicles

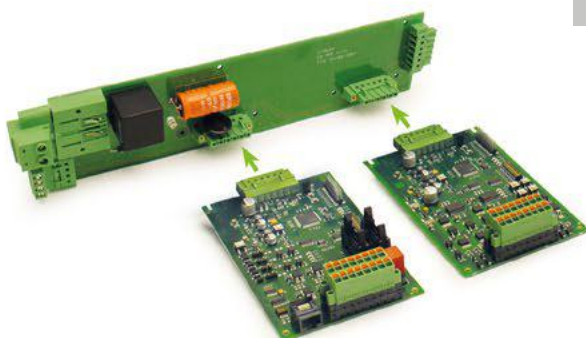
For the equipment of your heavy utility vehicles, we recommend the character heights : **H200** and **H250** mm in 9 to 10 characters with spacing or 12 characters in a **continuous matrix**.

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 .



**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.





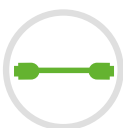
## Control Panels

## 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/m<sup>2</sup>, +/-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  
ConnectionBUS single  
cable onlyQuick  
setupPC  
setupAdjustable  
standÉcran  
LCDLED  
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/m<sup>2</sup>, +/-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

## 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

- 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.**





## On-Board Range

### 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 1000 - 1250 mm :
  - Aluminum sheet with flanged edges.
  - Class 2 adhesive, symbol of your choice.
  - Equipped with 6 Ø 130 mm optics with 70 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.).



*Dual-symbol version with integrated double-sided triangle*



### 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 :
  - Triangle 500 directly integrated into the 16-lens arrow board fairing
  - Triangle 700 in 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.**





## On-Board Range

### 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

## 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



100% LED



## 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.

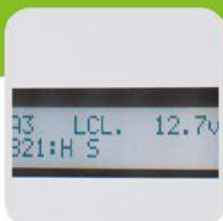
## Local control cabinet

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 Trailers

### 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



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  
See page 43.



## VMS Trailers



## 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.

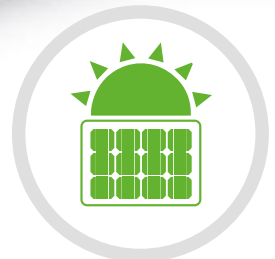
**Power supply :**

- 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

### 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



## Picto Trailers

### 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).

**NEW**



**55078**

Full-Color urban pictogram micro trailer



# REINFORCED & ANIMATED POLICE SIGN

*Extended reinforcement, it breaks habits*

*Some examples:*



**Scrolling**  
Example :  
symbol A13b



**Animated**  
Example :  
symbol A21



**Alternating**  
Example :  
symbol B3



**Rotating**  
Example :  
symbol AB25



**Triple**  
Example :  
symbol A13a



*Even more impactful, it brings the symbol to life*

*and increases reinforcement time by 50%*

*double-flash standard*

**1st level reinforcement**

*additional animated light sequences\**

**2nd level reinforcement**





## Illuminated Signals

### PERMANENT

Sign lighting equipment ■ p. 56

Curve light-signaling ■ p. 57

Enhanced signaling ■ p. 58 - 59

Dynamic enhanced signaling ■ p. 60 - 61

Permanent signal options ■ p. 62 - 63

Power supplies ■ p. 64 - 65

Green-reward traffic lights ■ p. 66 - 67

Radar speed sign ■ p. 68

Short stop terminal ■ p. 69

Traffic control lights ■ p. 70

Island point warning lights : Eclipse ■ p. 70



**SIGN LIGHTING  
EQUIPMENT** P 56



**CURVE LIGHT-SIGNALING** P 57



**ENHANCED SIGNALING** P 58-59



**GREEN-REWARD  
TRAFFIC LIGHTS** P 66-67

## Sign Lighting Equipment



→ 5559

→ 1684  
→ 1686  
→ 3156

### 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.**

#### Optic Ø300

**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



→ 879

→ 1665  
→ 1666  
→ 1660

→ 35629

#### Optic Ø200

**Optic Ø200 mm with 80 yellow LEDs.** Fixing using rear plate (most 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

#### Optic Ø130

**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



# Curve Light-Signaling

## No need to connect the equipment together :

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**



### 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 (600 x 600 / 800 x 800...).

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 400 x 400mm is composed of a thin aluminium box (70 mm).

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 (600 x 600 / 800 x 800...).

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**

### Qualified & sorted LEDs

(High intensity & high efficiency)

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



	Small	Normal	Large
 <b>A Category</b>	700	1000	1250
 <b>B Category</b>	650	850	1050
 <b>C Category</b>	500	700	900

All sizes and formats:

**Contact us**  

### Options

Speed or presence detection radar, timer etc.

Adapt equipment to meet your requirements, options on pages 62 and 63

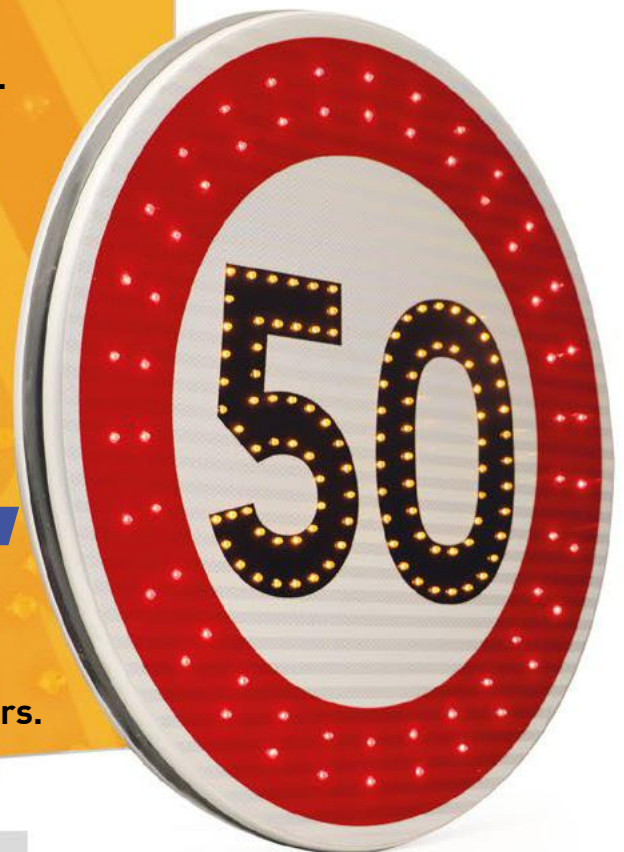






## Advantages :

- 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.



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 is 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

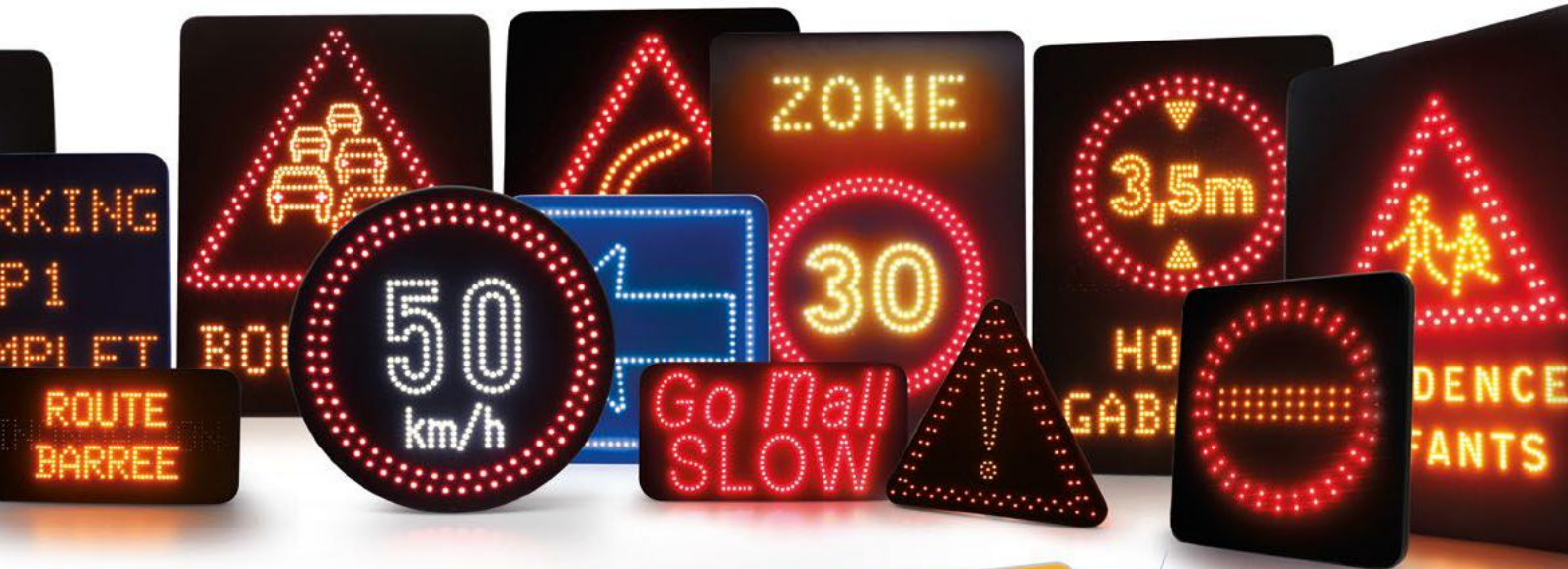
Speed or presence detection radar, timer etc.

Adapt equipment to meet your requirements, options on pages 62 and 63





## Dynamic Enhanced Signaling



## Advantages :

## ■ 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.**

## ■ Qualified &amp; sorted LEDs (High intensity &amp; high efficiency)

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

electronic  
**IP68**

**NEW**



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**  



## Permanent Signal Options

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**

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.

## Power Supplies Using Public Lighting

### 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.

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

#### Differential Circuit Breaker

<b>3117</b>	30 mA differential circuit breaker
-------------	------------------------------------

Find the right power supply for your product :



Permanent optics

- .. Biflash kit 130 / 30 (réf.35837)
- Optique 200 / 80 (réf.1660)
- Optique 300 / 225 (réf. 3156)

24 / 7  
operation



15 W 7 Ah  
(réf. 34577)

Options		
with weekly clock*	with speed detection radar**	with motion detection radar
* Operates 4 hours daily	** Operates 8 hours daily	** Operates 8 hours daily

15 W 7 Ah  
(réf. 34577)



Enhanced Signaling

- ▲ Triangle 700
- ▲ Triangle 1000
- Rond 650
- Rond 850
- C20 500
- C20 700
- C20 900

15 W 7 Ah  
(réf. 34577)

15 W 7 Ah  
(réf. 34577)



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.



# Solar Power Supplies (photovoltaic)



## 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.

<b>35637</b>	Solar Power Kit 10 W 7 Ah Battery supplied
<b>23278</b>	Solar Power Kit 0 W 17 Ah Battery supplied
<b>28616</b>	Solar Power Kit 40 W 34 Ah Battery supplied
<b>28664</b>	Solar Power Kit 60 W 60 Ah Battery supplied
<b>32692</b>	Solar Power Kit 100 W 60 Ah Battery supplied
<b>48101</b>	Solar Power Kit 120 W 60 Ah Battery supplied
<b>33402</b>	Solar Power Kit 165 W 120 Ah Battery supplied
<b>47909</b>	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 :*



Permanent optics

- Biflash kit 130 / 30  
(réf.35837)
- Optique 200 / 80  
(réf.1660)
- Optique 300 / 225  
(réf. 3156)

24 / 7  
operation



with  
weekly clock\*



\* Operates  
4 hours daily

with speed  
detection radar\*\*



\*\* Operates  
8 hours daily

with motion  
detection radar



\*\* Operates  
8 hours daily

10 W 7 Ah  
(réf. 35637)

10 W 7 Ah  
(réf. 35637)

20 W 17 Ah  
(réf. 23278)

20 W 17 Ah  
(réf. 23278)

10 W 7 Ah  
(réf. 35637)

20 W 17 Ah  
(réf. 23278)



Enhanced Signaling

- ▲ Triangle 700
- ▲ Triangle 1000
- Rond 650
- Rond 850
- C20 500
- C20 700
- C20 900

20 W 17 Ah  
(réf. 23278)

20 W 17 Ah  
(réf. 23278)

10 W 7 Ah  
(réf. 35637)

20 W 17 Ah  
(réf. 23278)

10 W 7 Ah  
(réf. 35637)

10 W 7 Ah  
(réf. 35637)

20 W 17 Ah  
(réf. 23278)

20 W 17 Ah  
(réf. 23278)



Dynamic Enhanced  
Signaling

Contact us

PERMANENT

SIGNALING

## Green-Reward Traffic Lights

Limit road abuses and  
encourage good behaviour

Notre gamme : fruit de l'expertise d'un spécialiste !

### PERMANENT

230 V



### TEMPORARY

Solar\*



### MOBILE

Solar or  
Rechargeable battery



**The perfect combination!**

*The aesthetics of a fixed traffic light,  
all the advantages of a temporary traffic light...*

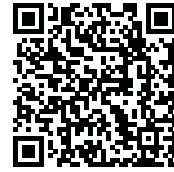
\*or Public Lighting



PERMANENT

SIGNALING

# Green-Reward Traffic Lights



Watch the video

## How it works?

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



## 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 Solar power

32407

Green-reward traffic lights - solar power

### TEMPORARY Using Public Lighting:

32406

Green-reward traffic lights - using public lighting

### 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\*

62534

Solar power option

37744

KC700 Class 1 panel  
«SPEED RESPECTED = GREEN LIGHT»

\* (battery not included)



*Configuration options  
or your equipment:*

Repeater, information sign, red cross  
optic, inductive loop detector...

**Consultez-us**



## 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

## Radar Speed Sign



RANGE  
**EASY**  
simple & compact



→ 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

RANGE  
**ESSENTIEL**  
3 integrated digits

Configure it according to your needs

For educational speed radar signs with options (data collection, matrix text, etc.)

**Contact-us**  



These devices can be powered by mains electricity, solar energy, or public lighting.

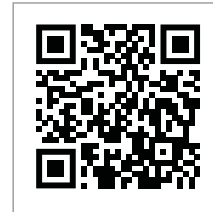


## Short Stop Terminal

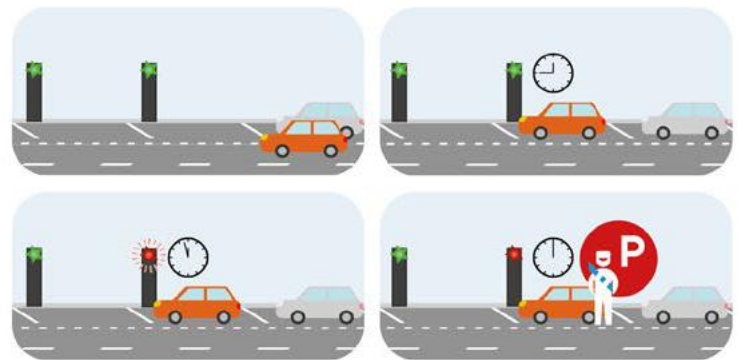
*The ideal solution for managing limited-duration parking spaces.*

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

### How it works?



Voir la vidéo



### Short Stop Terminal

Our parking bollards allow parking for a limited duration, programmable from 10 to 40 minutes.

They can be equipped with a countdown timer, manage a single or double parking space, and be powered by 230 volts or public lighting.

These bollards can be complemented with a clock option or an "SMS notification" option (in the event of exceeding the authorized parking time).

Our short-stay parking bollards can be customized with the municipality's choice of logo, text, and paint finish.

**The detection and management system** does not require complex commissioning. With a single, straightforward setup and no adjustments needed, the desired parking duration is defined at the factory or by you, with ease.

**Our short-stay** parking bollard is equipped with a latest-generation electromagnetic detector.

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



## Traffic Control Lights



### Traffic Control Lights Ø 200

Polycarbonate assembly equipped with 2 optics Ø200 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

## Eclipse



### 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-authorized 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 Traffic Technologie System falls.

### Section 10 - EEE

The unique identifier FR025658\_05TOSA 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 Activities



## Intelligent Transport Systems



## Parking Systems Signalling



## Digital Display Systems



Download this document



TTS (Trafic Technologie Système) S.A. with a share capital of 1 088 000 Euros - RC Grasse B 398 379 214 - Siret 398 379 214 00065

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