V2S
Vehicle Safety Solutions
www.V2S.eu

ec2e

ESK M4

Remote management,
Automatic reports,
Connected equipment : manage your fleet in one click !

Fleet
management

The ESK M4® is a "full web" access control solution that allows you to have a global overview of the activity of your operators and the commitment of your equipment in one click.

You also receive automatically by mail the detailed reports of the criteria that you will have choosen and you are alerted in real time of any recognized defects.

Multi-brand and multi-voltage, our solution is adaptable to all sectors of activity (airport, automotive, food industry ...)

Functionalities

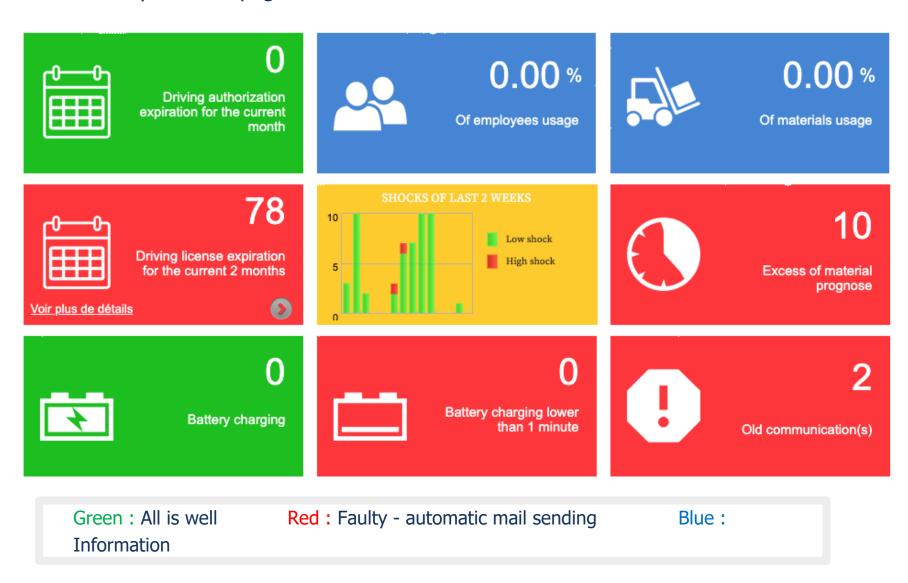| Access Control	• Limits access to equipment to authorized personnel only
	• Start-up by multi-technology badge, RFID key or code keyboard
	• Management of CACES, driving authorizations and medical visits
	• 'Novice driver' function (downgraded mode according to the chosen profile)
	• Creation of specific access
Shocks Detection	• Remote parameterization, by the management platform
	• Mail alert in case of important shock on material
	• Geolocation of shocks by GPS : ▪ Allows the identification of risk areas and the possible need for operator training ▪ Allows to make operators responsible and to control the expenses related to the bad use of the material ▪ Reduce costs related to breakage (equipment, infrastructure) and optimize machine use time
GPS Tracking	• Location of shocks on equipment
	• Geofencing : alert in case of exit from predefined zone
	• Daily route of the material (loaded or empty)
	• Localization of inert materials (option)
CHECK-BOX **(Available as a stand-alone version or as an option M4®)**	• Replaces the 'paper' logbook
	• History of the answers
	• Mail alert if a defect is recorded
	• Customizable questions
	• Random order of the questions display
Hour Meter	• Hour meter feedback by CANBUS or meter input
	• Allows you to control the operating hours and to adapt your rental contracts
Sending An Instant Message	• Allows the sending of messages on the cabin display for urgent missions

Fleet management

Dashboard

By the web management platform, you can track essential criteria such as:

- The commitment of the materials
- The activity of the operators
- Geolocation of your equipment
- The shocks and their geolocation...

According to your needs, you can customize the display of the modules on your homepage !

Automatic alerts are also available on sensitive criteria such as :

- Date of medical visit
- Shock
- Zone exit
- CACES
- Material information feedback

Informed in real time, you gain in reactivity and can set up the necessary corrective actions.

0 Driving authorization expiration for the current month	**0.00 %** Of employees usage
78 Driving license expiration for the current 2 months — Voir plus de détails	SHOCKS OF LAST 2 WEEKS / Low shock / High shock
0 Battery charging	**0** Battery charging lower than 1 minute

0.00 % Of materials usage

10 Excess of material prognose

2 Old communication(s)

Thanks to a logical color code, you know what's going on at a glance !

Green : All is well   Red : Faulty - automatic mail sending   Blue : Information
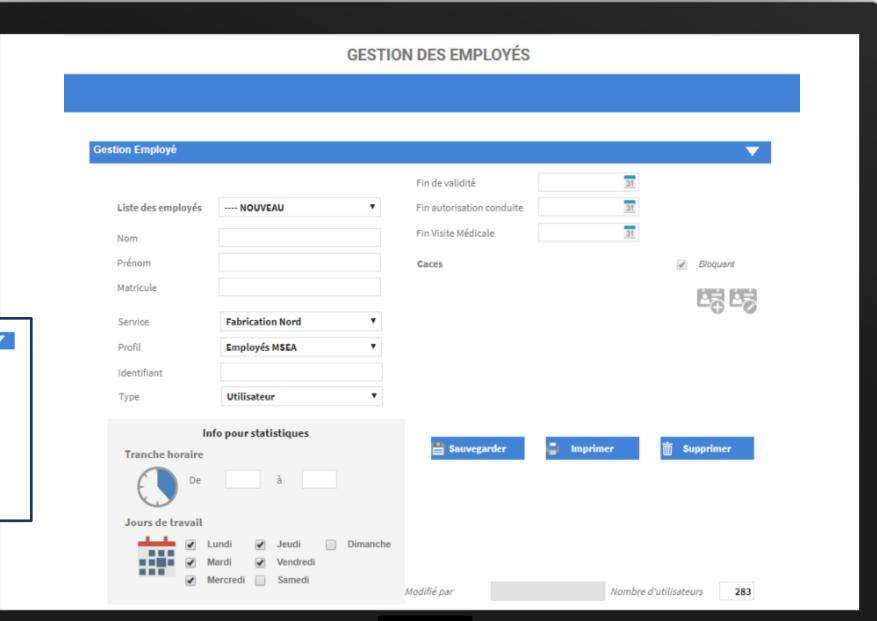
Fleet management

Employee management

The ESK M4® solution allows you to secure the use of your equipment by limiting access to authorized persons only.

You can manage :
- The dates of CACES and training of users
- Their profile
- The work periods
- Their authorizations by equipment...

Our solution is available in key or badge version (any technology).

Fleet
management

Materials management

Shocks, time meter, geolocation...

All management criteria are integrated and displayed in a clear and synthetic way.

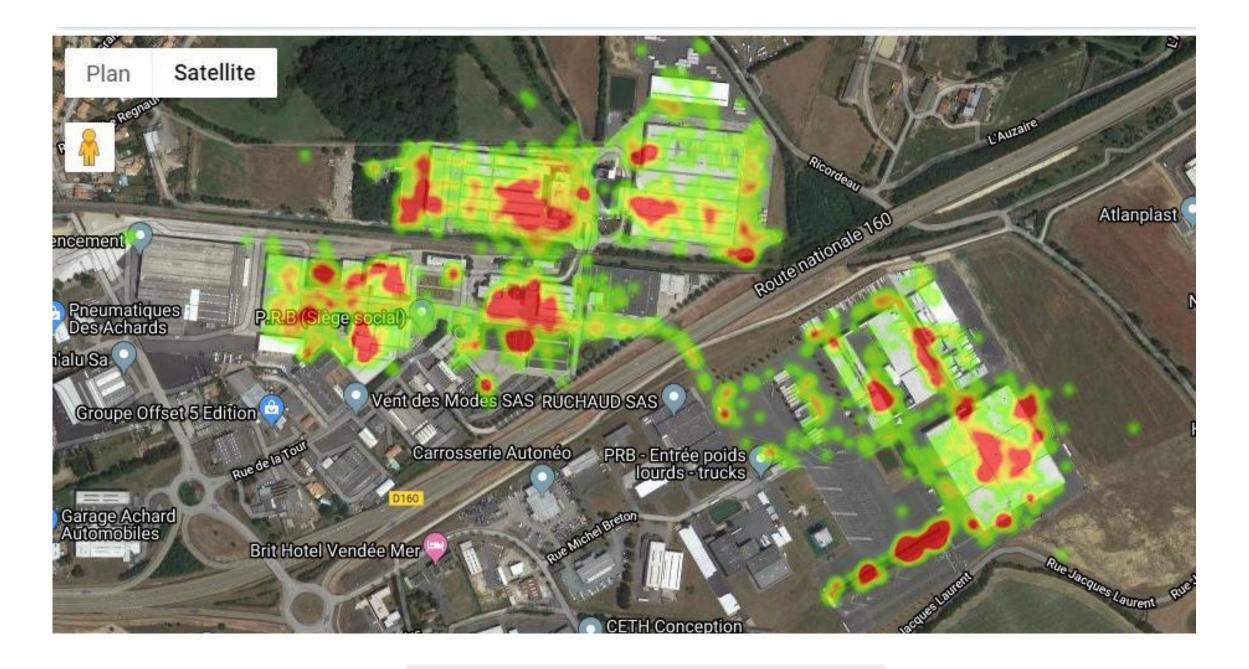This way, you can monitor the status of your equipment as closely as

possible.

Modifier	Désignation	N° Parc	H1	H3	Famille	Site	Vu le	Choc	GPS	Prog.	Carb.	Maint.	Maint.
ELECTROCABLAGE													
DX Family			Total: 5	D: 3	U: 0	I: 2							
⚙	Test DDC	00085			DX Family	Site EC2E	06/07/2015 12:40:37			✓			✓
⚙	Barre de traction	0081			DX Family	Site EC2E	19/03/2015 19:10:52		📍	✓			✓
⚙	Barre de traction 2	0082			DX Family	Site EC2E	19/03/2015 19:10:52		📍	✓			✓
⚙	Demo Salon	00EC			DX Family	Site EC2E	19/11/2015 17:17:51			✓			✓
⚙	Test Belo	11234			DX Family	Site EC2E	14/12/2015 15:38:35			✓			✓
Dubois			Total: 2	D: 1	U: 1	I: 0							
⚙	Chariot GPS 1008	1145			DX Family	Site EC2E	22/11/2016 16:04:48		📍	✓	🟡 13%		✓
⚙	Chariot	1235	1 300,15	4,23	Chariot	Site EC2E	07/12/2016 11:41:55	⚠	📍	✓	🟢 14%	🟡 33 h	✓
LX Family			Total: 1	D: 1	U: 0	I: 0							
⚙	TX_4_2	15434	1 883,33		LX Family	Site EC2E	09/07/2015 17:26:02			✓			✓
Skos			Total: 1	D: 0	U: 1	I: 0							
⚙	TEST CAN BUS	1637B66EE5		1,22	Chariot	Site EC2E	23/05/2017 14:01:00			☐			✓
Tracteur			Total: 1	D: 0	U: 0	I: 1							
⚙	Barre de traction 3	0083			Tracteur	Site EC2E	19/03/2015 19:10:52		📍	✓			✓

**Fleet
management**

Geolocation of materials

A specific cartography translates the routes and the location of your materials :

The redder the area, the heavier the traffic

Identify 'accident-prone' and
'stopper' areas'

Fleet
management

Geolocation of materials

- The ESK M4 ® solution is able to locate each piece of equipment and to specify for each position: equipment identifier, date, time and speed at the time of location

- **You can access the visualization of your entire fleet (instant T) or the evolution of the position of each equipment (time range).**

H2X386J12117 - 1824
21/01/2020 15:51:13
Hors Zone
Vitesse(Km/h) : 0
Latitude: 46.60702225 Longitude: -1.64933168
ville inconnue

Our location tool also allows you to visualize the routes taken and the direction of movement of materials: flows can be optimized to gain in productivity
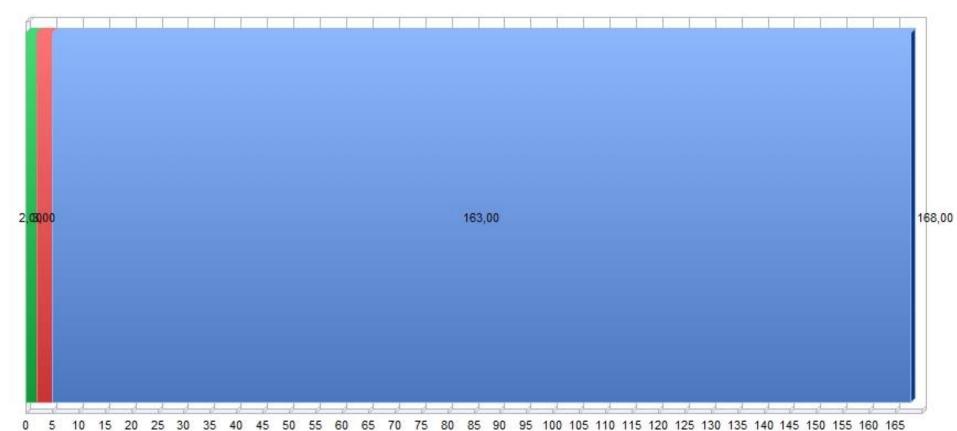
Fleet management

Materials management

- Shocks and hour meter
- Activity time range
- Linked contract
- Maintenance follow-up ...

All the management criteria are integrated and allow you to monitor the status of your machines as closely as possible.
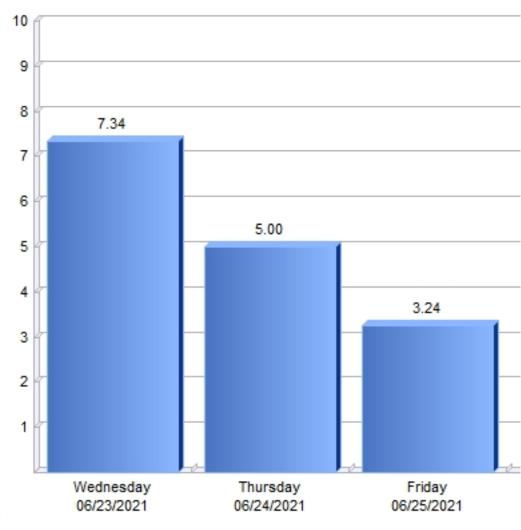
Good to know !

The ESK M4® integrates 4 additional inputs such as hour meter or fault to allow you to go even further in the management of your equipment.
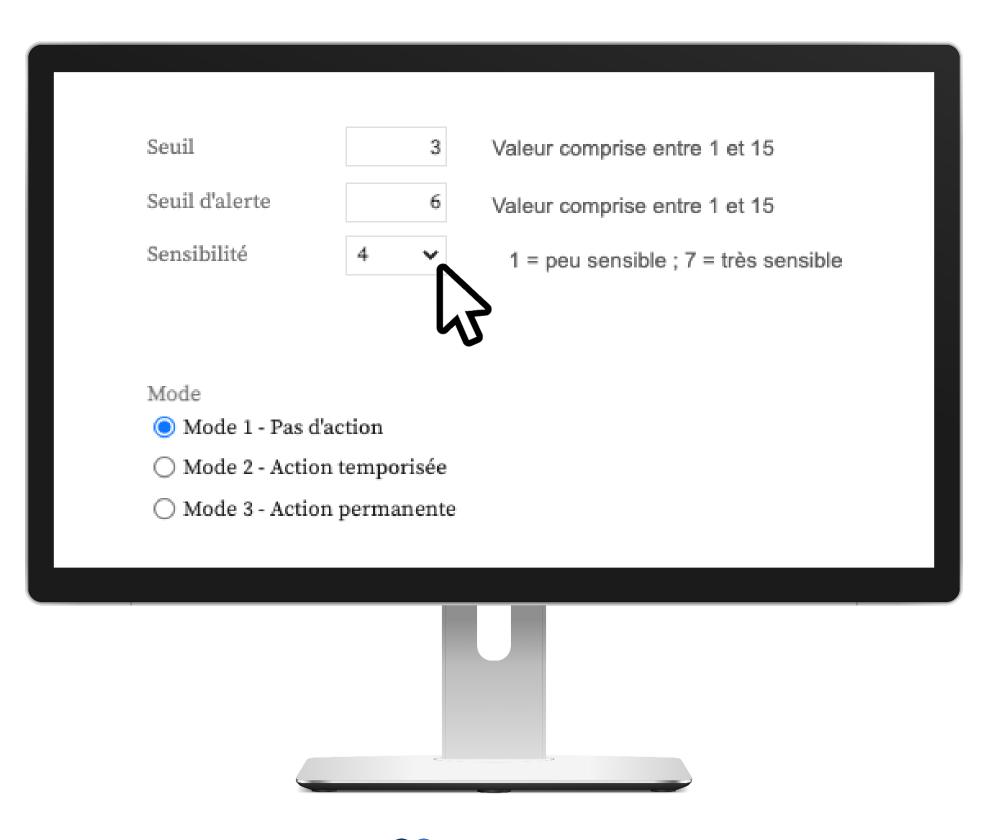
Commitment of one material per user over a defined period

Material commitment over a defined period

Shock detection

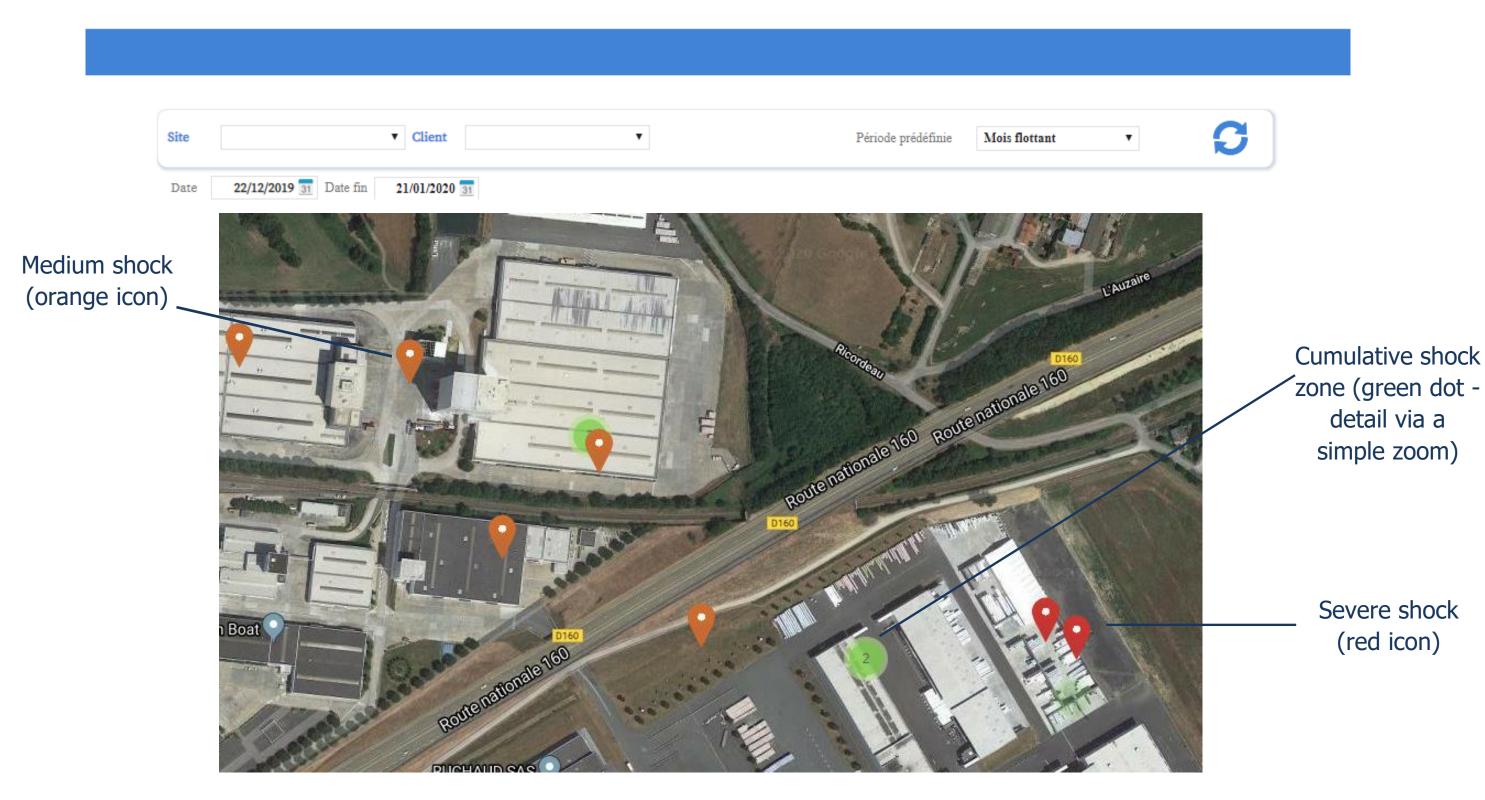You define directly on the management platform the shock thresholds according to the tonnage of the materials.

Seuil	3	Valeur comprise entre 1 et 15
Seuil d'alerte	6	Valeur comprise entre 1 et 15
Sensibilité	4 ⌄	1 = peu sensible ; 7 = très sensible

Mode
- ● Mode 1 - Pas d'action
- ○ Mode 2 - Action temporisée
- ○ Mode 3 - Action permanente

Fleet management

Geolocation of shocks

A specific reporting allows to visualize where the shocks occur >> the "accidentogenic" zones

are identified

>> corrective and preventive actions can be implemented.

Medium shock
(orange icon)

Cumulative shock
zone (green dot -
detail via a
simple zoom)

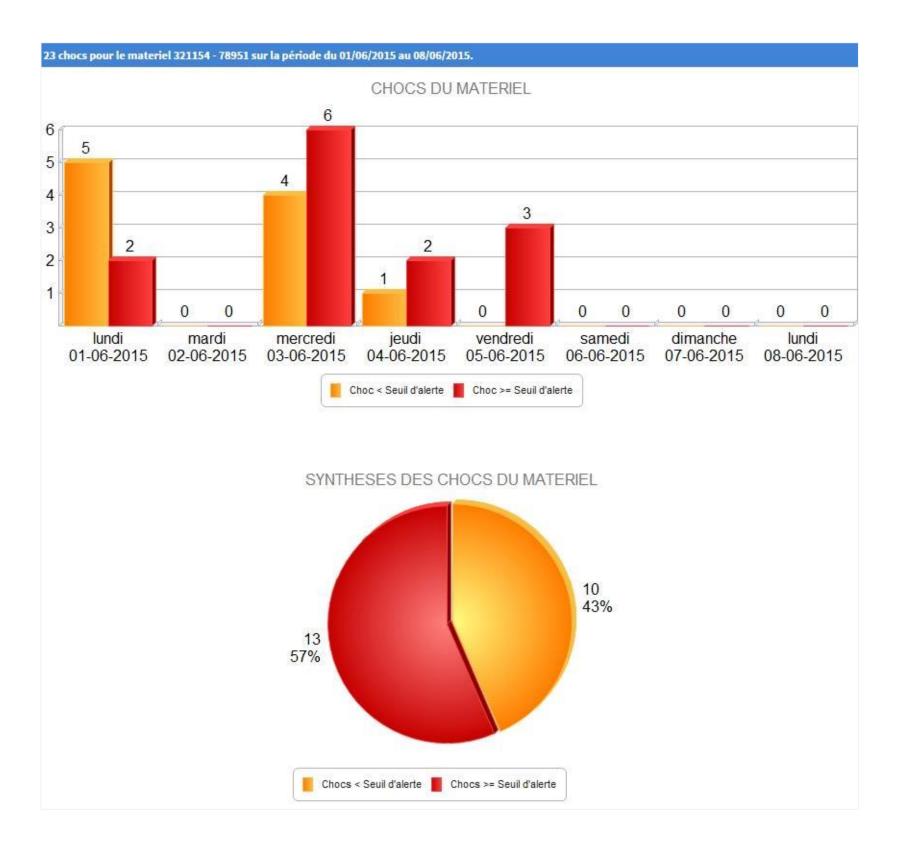Severe shock
(red icon)

Fleet
management

Shock reporting

In the general reporting, the number of small and large shocks is highlighted. They are also detailed in the weekly reports.

Important shocks are notified by email to the administrator and/or the platform manager (recipients defined by the customer).

23 chocs pour le materiel 321154 - 78951 sur la période du 01/06/2015 au 08/06/2015.

CHOCS DU MATERIEL

Choc < Seuil d'alerte   Choc >= Seuil d'alerte

SYNTHESES DES CHOCS DU MATERIEL

10 43%
13 57%

Chocs < Seuil d'alerte   Chocs >= Seuil d'alerte

CHOCS DES 2 DERNIÈRES SEMAINES
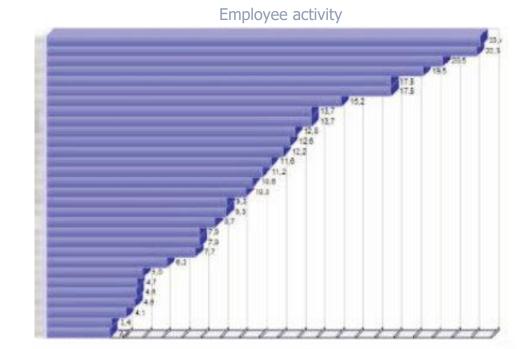
Choc faible
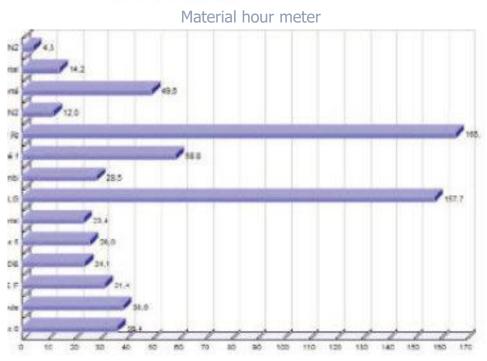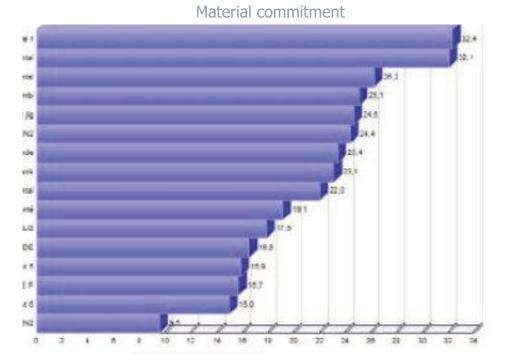Choc important

Fleet management

Automatic reporting

You automatically receive by mail your detailed reports on the criteria you choose and can instantly optimize the management of your fleet !

- Material schedule
- Material commitment per employee
- User activity (in hours, by equipment...)
- Report of average and severe shocks : by material, by user, by zone...

Fleet management

Employee activity

Material hour meter

Material commitment

The advantages

Management of CACES with automatic alert before expiration

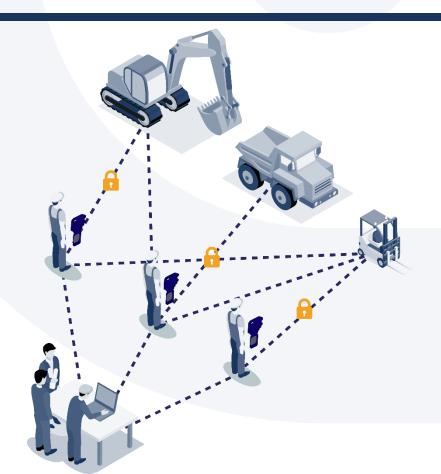Management of the history of shocks and defects

Management of driving authorizations

Management of lost or stolen keys guaranteeing a unique key per user

Access by personal login and password

French-made product

Data hosting in France

Ensure safety in the operation of equipment

Optimize the management of the fleet and simplify the follow-up of the keys

Empower the forklift drivers

Reduce costs of breakage and downtime

Reduce costs of use

Access to the management platform by a simple Internet connection

Unique solution independent of manufacturers and distributors

Fleet management

Technical Data

ESK M4	Réf : 740 —
Manufacturer	ELECTRO CABLAGE
Type	Acess Control
Operation	Key / Badge
Inputs and registration	- User presence timer - 2 voltage inputs 12-80V --> on/off (Time meter) - 1 dry contact input on hardware fault - 1 dry contact input for seat timing voltage (Programmable)
Power supply & Consumption	12 - 48V 2,4W max - 200 mA max under 12V - with shock sensor
Connections & Equipment	- 1 M12 male 8 pts : Power supply and relay - 1 M12 female 8 pts : Contact and voltage inputs - 1 M8 male 5 pts : Badge / Key / Keyboard - 1 M8 female 5 pts : CANBUS peripherals - 1 SMA female : 4G / 3G / 2G or Wifi antenna (option) - 1 SMA female : GPS antenna (option)
Key / badge reader	Cf reader document
Option	Shock sensor - Geolocation - Canbus - Analog inputs
Information feedback	Wifi, GPRS/4G
Programming and commissioning	Web Site
Operating temperature	-20 - 50 °C
Materials	ABS V0
Weight	275 g
Case dimensions	80 x 44 x 147 mm

Available options

	Description	Référence
	Extension cable Canbus 4 points 2m Extension cable Canbus 4 points 5 m	737020 737021
	Converter 80V - to 12V - (600mA) if material voltage higher than 48V	734083
	Optional external relay 12V relay Relay 24V Relay 48V Relay 80V	320101 320001 320002 320003
	Start button Start / Stop button	320102 320111
	Electronic shock detector XL4 Electronic shock detector XL6	739002 739006
	4G/GPRS antenna for outdoor geolocation	734010
	Customizable electronic checklist 12V	739540
	Check-box converter for higher voltage 12V	739083
	Additional inputs module (ADC CAN) : - 3 analog voltage (Example: battery voltage)	739200
	Additional relay module (CAN relay)	739600
	CanBus Gateway Interface (PassCan)	739400

Fleet management

To go further …
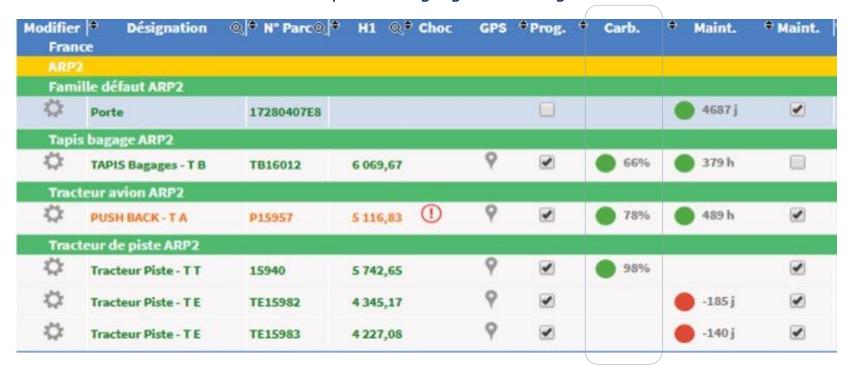
Additional module

The ESK M4 ® can be completed by an additional module able of managing :
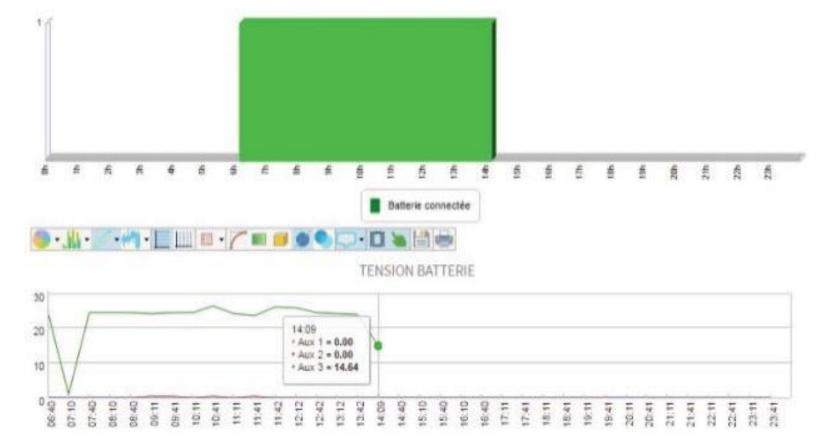
- Metering
- Voltage
- Analog

Possible applications :

- Battery voltage reading and deep discharge warning

Example of fuel gauge monitoring

Modifier	Désignation	N° Parc	H1	Choc	GPS	Prog.	Carb.		Maint.		Maint.
France											
ARP2											
Famille défaut ARP2											
⚙	Porte	17280407E8				☐			🟢 4687 j	☑	
Tapis bagage ARP2											
⚙	TAPIS Bagages - T B	TB16012	6 069,67		📍	☑	🟢 66%		🟢 379 h	☐	
Tracteur avion ARP2											
⚙	PUSH BACK - T A	P15957	5 116,83	⊘	📍	☑	🟢 78%		🟢 489 h	☑	
Tracteur de piste ARP2											
⚙	Tracteur Piste - T T	15940	5 742,65		📍	☑	🟢 98%			☑	
⚙	Tracteur Piste - T E	TE15982	4 345,17		📍	☑			🔴 -185 j	☑	
⚙	Tracteur Piste - T E	TE15983	4 227,08		📍	☑			🔴 -140 j	☑	

Example of battery voltage monitoring

■ Batterie connectée

TENSION BATTERIE

```
14:09
· Aux 1 = 0.00
· Aux 2 = 0.00
· Aux 3 = 14.64
```
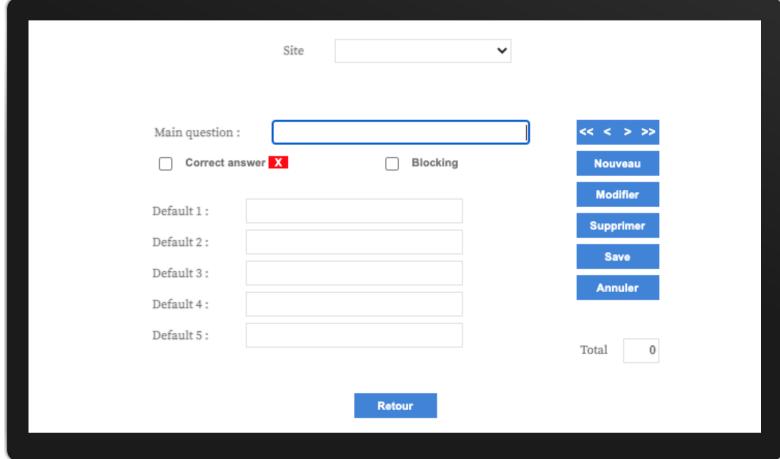
Fleet management

CHECK-BOX

You have the possibility to couple your ESK M4 $^®$ fleet management with a CHECK-BOX, an electronic version of the daily checks.

Fully customizable, the CHECK-BOX allows an automatic backup of the data, which can be consulted on demand, according to your needs !

By your M4 web platform, you customize your question lists and assign them by type of material (example: front-end checklist).
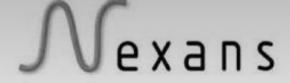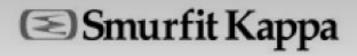The transmission to the equipment is done remotely, depending on the communication mode used (4G or Wifi).

Site

Main question :   << < > >>

☐ Correct answer **X**   ☐ Blocking   Nouveau

Modifier

Default 1 :   Supprimer

Default 2 :   Save

Default 3 :   Annuler

Default 4 :

Default 5 :   Total   0

Retour

User ID   CHECK BOX   Date Time
Forklift ID   Close
Fluid level   Yes   No
☐ Brake oil   ☐
☐   ☐
        ☐
◀   2 / 4   ▶

User ID   CHECK BOX   Date Time
Seat Belt   Yes   No
◀   4 / 4   ▶

Fleet management

They trust us...

V2S Vehicle Safety Solutions
www.V2S.eu

V2S, de technologie voor uw veiligheid.

Samen zoeken wij graag naar een oplossing voor uw
zicht- en veiligheidsprobleem.

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