

## INNOVATION | DESIGN | INDUSTRIALIZATION | PRODUCTION





## IoT & Big Data

Raw and Big Data management and IoT telematics application

## **Telematics Devices**

Hardware, Firmware, Software and Safety on-board

## **Service Platform**

Development and service delivery. Waste Management Solutions and Smart Cities

## **Data Processing**

**Data Collection & Data Transmission** 

## **Electronic Manufacturing**

Industrialization, assembly, supply chain and quality process

## **Research & Development**

Design, engineering, testing and project delivery

## **SLIMBOX 2.0**

#### Insurance miniaturized device

SlimBox is the new small-sized satellite tracking system. It has been designed to offer telematics solutions for the insurance market, since it has all the features and characteristics of an advanced "insurance box", with the advantage of a maximum simplified installation.

Actually the device, thanks to IP65 protection, can be installed anywhere in the vehicle: in the cockpit, on the windshield, in the hood or in the trunk.

The collected analytical data therefore become a fundamental tool for the development of statistics of vehicle use and they also allow the crash dynamics reconstruction.



Recording and communicating data journey and those of a possible crash



## **SLIMBOX 3.1**

#### Insurance miniaturized device



Viasat SlimBox 3.1 OBD is the new, compact satellite locationing system created by Vem with the aim of providing telematics solutions for the insurance market. The device integrates all the following components: MODEM, On chip SIM Card, GNSS multi-constellation module, internal antennas, accelerometer and triaxial gyroscope for crash detection, a second accelerometer dedicated to the driving style, memories, Classic and Low Energy Bluetooth® connectivity. The installation of this device is made easy by its extremely low thickness and by a high IP65 protection level.





## **SLIMBOX 3.1 EASY**

#### Insurance miniaturized device

Viasat SlimBox 3.1 Easy is the new small-sized satellite tracking system, conceived by Viasat to offer telematic solutions for the insurance market. The device integrates all components: MODEM, SIM on Chip, multi-constellation GNSS module, internal antennas, accelerometer and triaxial gyroscope for crash detection and driving style, memories. The installation of this device is facilitated by an extremely reduced thickness and a high degree of protection IP65.





## **SLIMBOX 3.2 MOTO**

## R TECH IN



#### Insurance miniaturized device

Motorcycle SlimBox is the new small-sized satellite tracking system. It has been designed to offer telematics solutions for the insurance market, since it has all the features and characteristics of an advanced "insurance box", with the advantage of a maximum simplified installation.

The native functions of the device allow recording, store and communicating to the Control Room data on journey and those of a possible crash, allowing you to pinpoint the motorcycle position. The collected analytical data therefore become a fundamental tool for the development of statistics of motorcycle use and they also allow the crash dynamics reconstruction.





## **SOSCALL 2.0**

#### CLICK OR SCAN



## Personal safety & vehicle protection services for insurance company

sosCall 2.0 is a system for localization and communication in a compact and innovative design.

The device integrates all the components including antennas, triaxial accelerometer and speaker. Easy to install, it is placed inside the passenger compartment on the windshield of the vehicle to receive assistance.

In case of emergency pressing button starts a voice call to the Operation Centre, which locates the vehicle and provides the requested assistance.





## **BLUBOX BASIC 1.0**

# PARTECHINFO

## **Safety & Security device**

BluBox is an innovation in the field of satellite tracking systems to ensure the increased performance of Safety and Security, available on the market, of the vehicle insured and person.

BluBox stands out for its sophisticated design and extreme compactness that makes easy placement. The installation is quick, non-invasive (no holes and no screws), self-centered via cradle.

All the versions of BluBox are scalable: they can be implemented with different accessories.





## **BLUBOX CAN**



### Fleet management & Smart Connect business model device

BluBox CAN is an innovation in the field of satellite tracking systems to ensure the increased telematics performance, for Fleet, Smart Connect business model. BluBox CAN stands out for its sophisticated design and extreme compactness that makes easy placement. The installation is quick, non-invasive (no holes and no screws), self-centered via cradle. In addition, the "Seal of Guarantee", placed at the end of the test, certifies the quality and traceability of the installation.

\*The project was developed in collaboration with Viasat Monitoring (Poland).





## **BLUTRACK 5.0**

### **Powered device for tracking Trailers and Semi-Trailers**

BluTrack 5.0 is a localization system designed to protect and detect the position of trailers and semi-trailers, among others. It is a device powered by a long-life backup battery, specially designed for monitoring trailers. This device has been studied to be placed both inside or outside the trailer. The BluTrack 5.0 is completed with unique QR-code for tracking it. Easy to install, thanks to its compact size, the device can be connected with two wires for power supply and 2 wires for the mechanical switch (optional) that controls the opening of the tailgate.





## **BLUTRACK 7.0**



## The device for stolen vehicle tracking and recovery

BluTrack 7.0 is a self-powered device expressly designed for long autonomy, based on GSM/GPRS and GNSS technology. This device is aimed primarily at tracking functions, such as those of a stolen vehicle search; It supports a flexible switch between continuous mode (real time monitoring) and power save mode which periodically confirms vehicle status. The BluTrack 7.0 is equipped with primary batteries that allow a range of up to 3/5 years without having to be replaced.







## **BLUTRACK 8.0**

### The device for the protection and location detection of vehicles

Viasat BluTrack 8.0 is a tracking system designed for the protection and location detection of vehicles. It is a self-powered device, which can be discreetly placed on board the vehicle to ensure that it is concealed from the eyes of potential thieves. In case of theft of the vehicle, the Operations Center is able to detect the position of the vehicle at the request of the customer. It is a particularly suitable solution when it is not necessary to have continuous monitoring of the asset. Easy to install, thanks to its compact size, it has an autonomy of about 3 years in its standard configuration, guaranteed by the internal long-lasting batteries.

\* Present on ViasatLine but currently only available for Viasat Italy





## **RUNTRACKER 6.0**

#### CLICK OR SCAN FOR TECH INFO



#### Fleet management device

RunTracker 6.0 is the new on board device specific for the management of fleets of truck that offers innovative and more competitive web-based services for Fleet management, for personal security and for the traceability of transported goods. Furthermore, the RunTracker 6.0 terminal allows to handle the management of fleets dedicated to companies that operate in the urban hygiene market (it provides reports and information on the location, routes, stops, in general on the daily life of your vehicles).

\*Device accessories available (scan the QR)!



Fleet management services and urban hygiene solutions



Crash alert and crash dynamic in case of an accident



Statistics and reports (fuel consumption, temperature, excise management, etc)





## **RUNTRACKER 6.1 EASY**



## Fleet management device

RunTracker 6.1 EASY is the new light on board device specific for the management of fleets of truck that offers innovative and more competitive web-based services for Fleet management and for the traceability of transported goods. Furthermore, the RunTracker 6.1 EASY terminal provides reports and information on the location, routes, stops, in general on the daily life of your vehicles.

\*Device accessories available (scan the QR)!



Fleet management services



Crash alert and crash dynamic in case of an accident



Statistics and reports (location, routes, stops, daily vehicles life)





## **RUNTRACKER 6.2 TAPA 2G**

#### CLICK OR SCA FOR TECH INF



#### Fleet management device

RunTracker 6.2 is able to communicate quickly through the 2G module which, as standard, guarantees coverage throughout the EMEA area. The on-board device is specific for the management of truck fleets and offers innovative and more competitive web-based services for fleet management, personal safety and the traceability of transported goods. The architecture of the device and the on-board Fw make it compliant with TAPA safety requirements.

\*Device accessories available (scan the QR)!



Fleet management services, personal safety and traceability of transported goods



Crash alert and crash dynamic in case of an accident



Statistics and reports (location, routes, stops, daily vehicles life)





## **RUNTRACKER 6.3 4G**

### Fleet management device

RunTracker 6.3 is able to communicate quickly via the 4G module which, as standard, guarantees coverage throughout the EMEA area. The on-board device is specific for the management of truck fleets that offers innovative and more competitive web-based services for fleet management, personal safety and traceability of transported goods. Furthermore, the RunTracker 6.3 terminal allows you to manage the management of fleets dedicated to companies operating in the urban hygiene market (it provides reports and information on locations, routes, stops, in general on the daily life of your vehicles).

\*Device accessories available (scan the QR)!



Fleet management services and urban hygiene market



Crash alert and crash dynamic in case of an accident



Statistics and reports (location, routes, stops, daily vehicles life)





## **RUNTRACKER 6.4 EASY 4G**

CLICK OR SCA FOR TECH INF



#### Fleet management device

RunTracker 6.4 EASY is able to communicate quickly through the 4G module which, as standard, guarantees coverage throughout the EMEA area. It is the new on-board lighting device specific for the management of truck fleets that offers innovative and more competitive web-based services for fleet management and for the traceability of transported goods. In addition, the RunTracker 6.4 EASY terminal provides reports and information on position, routes, stops, in general on the daily life of your vehicles

\*Device accessories available (scan the QR)!



Fleet management services, personal safety and traceability of transported goods



Crash alert and crash dynamic in case of an accident



Statistics and reports (location, routes, stops, daily vehicles life)





## **RUNTRACKER 6.5 TAPA 4G**

#### CLICK OR SCA FOR TECH INF



#### Fleet management device

RunTracker 6.5 is able to communicate quickly via the 4G module which, as standard, guarantees coverage throughout the EMEA area. The on-board device is specific for the management of truck fleets that offers innovative and more competitive web-based services for fleet management, personal safety and traceability of transported goods. The architecture of the device and the on-board Fw make it compliant with TAPA safety requirements.

\*Device accessories available (scan the QR)!



Fleet management services, personal safety and traceability of transported goods



Crash alert and crash dynamic in case of an accident



Statistics and reports (location, routes, stops, daily vehicles life)





# VEHICLE TRACKING PRODUCTS COMPARISON











PRODUCTS KEY FEATURES	SLIMBOX 2.0	SLIMBOX 3.1	SLIMBOX 3.1 EASY	SLIMBOX 3.2 MOTO	SOSCALL 2.0	
GSM/GPRS module	Quectel MC60 Multi Standard	Quectel, Modem Quad- band GSM/GPRS	Quectel, Modem Quad- band GSM/GPRS	Quectel, Quad-band GSM/GPRS	Cinterion Quad Band, Dual-Band PCB Antenna	
GPS/GNSS module	Operative GPS sensor	μΒlox TCXO Multi-constellation, acquisition rate up to 18 Hz	μΒlox TCXO Multi-constellation acquisition rate up to 18 Hz	, μBlox TCXO Multi-constellation, acquisition rate up to 18 Hz	Patch Antenna	
External memory	FLASH: 16 MB	E2PROM: 2Kbytes FLASH: 32 MB	-	E2PROM: 2Kbytes FLASH: 32 MB	-	
Bluetooth	-	3.0 EDR, BLE 4.1	-	3.0 EDR, BLE 4.1	-	
Primary power supply	12V external power supply	8 ÷ 32 Vdc	8 ÷ 32 Vdc	8 ÷ 32 Vdc	12 Vdc	
Backup power supply	Rechargeable Ni-MH, 600mAh	Ni-MH, 750mAh	Ni-MH, 750mAh	Ni-MH, 750mAh	200mAh @ 3,7 V	
SIM card	SIM on chip	SIM on chip	SIM on chip	SIM on chip	Only for VL version	
Dimensions	108 x 63 x 13.5 mm	108 x 63 x 13.5 mm	108 x 63 x 13.5 mm	108 x 63 x 13.5 mm	122 x 84 x 25 mm	
Working temperature	-30°C ÷ +60°C	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +70°C	
Installation	Cockpit/Dashboard/Windshield /Inside hood/Interior trunk	In the car or on battery according to the wiring type on the vehicle side depending the positioning of the OBD socket.	Interior passenger compartment, trunk where OBD socket is present). Fixing with double-sided tape or clamps	Under the saddle/inside the fairing top box/object holder	On the windscreen	
PRODUCT CODE	100903	100907	100938	100909	100854 (VL) 100855 (SC)	



# VEHICLE TRACKING PRODUCTS COMPARISON











PRODUCTS KEY FEATURES	BLUBOX BASIC 1.0	BLUBOX CAN	BLUTRACK 5.0	BLUTRACK 7.0	BLUTRACK 8.0
GSM/GPRS module	Cinterion BGS2-W, GPRS Class 10 Quad band	Cinterion BGS2-W, GPRS Class 10 Quad band	Cinterion (BGS2-Rev.2) Quad Band (Standard) – 2G	Quad band: 850/900/1800/1900 MHz	Quectel (BG77) Quad Band (Standard)
GPS/GNSS module	Maestro Wireless A2100-A (SBAS (WAAS, EGNOS, MSAS, GAGAN)	Maestro Wireless A2100-A (SBAS (WAAS, EGNOS, MSAS, GAGAN)	μBlox 6Q Standard GPS	u-blox All-In-One GPS receiver	μBlox ZOE-M8G, –167 dBm sensitivity, Standard BeiDou, Galileo, GLONASS, GPS / QZSS
External memory	-	-	-	-	-
Bluetooth	-	-	-	-	Standard 5.0
Primary power supply	7 ÷ 36 Vdc	7 ÷ 36 Vdc	12/24 V external power supply	CR123A lithium manganese dioxide battery pack	Self-powered with six internal non rechargeable primary batteries (Li SoCI2) "AA" size
Backup power supply	Rechargeable Ni-MH, 300mAh	300 mAh @ 7.2V NiMH	Rechargeable Ni-MH, 5,7 mAh	1500 mAh, 9V	-
SIM card	Only for VL version	Wireless Logic SIM	SIM on chip	Only for VL version	SIM 2FF, or SIM on chip (optional), or dual SIM. SIM installed as standard and not accessible from the outside
Dimensions	100 x 72 x 30 mm	100 x 72 x 30 mm	160 x 100 x 40 mm	118 x 69.5 x 26.8 mm	118 x 80 x 30 mm
Working temperature	-20°C ÷ +85°C	-20÷+85°C	-30°C ÷ +70°C	-20°C ÷ +60°C	-30°C ÷ +70°C
Installation	By bracket with warranty seal	By bracket with warranty seal. Useful for any kind of installation of the device. It permits the BluBox uninstallation without any damage	Internal on door jamb	<u>-</u>	The work does not require a specialized installer
PRODUCT CODE	100864 (VL) 100865 (SC)	100923	100862	100914 (VL) 100915 (SC)	100940 (device code for Viasat Italy with sim jasper provided by Viasat Italy)



# VEHICLE TRACKING PRODUCTS COMPARISON













PRODUCTS KEY FEATURES	RUNTRACKER 6.0	RUNTRACKER 6.1	RUNTRACKER 6.2	RUNTRACKER 6.3	RUNTRACKER 6.4	RUNTRACKER 6.5
		EASY	TAPA 2G	4G	EASY 4G	TAPA 4G
GSM/GPRS module	Quectel M66 quad band GSM GPRS with integrated Bluetooth 3.0 EDR	Quectel M66 quad band GSM GPRS with integrated Bluetooth 3.0 EDR	Quectel M66 quad band GSM GPRS with integrated Bluetooth 3.0 EDR	Quectel EG91-EX, 4G LTE Cat1, 3G UMTS/HSPA(+) and 2G GSM/GPRS/EDGE	Quectel EG91-EX, 4G LTE Cat1, 3G UMTS/HSPA(+) e 2G GSM/GPRS/EDGE	Quectel EG91-EX, 4G LTE Cat1, 3G UMTS/HSPA(+) e 2G GSM/GPRS/EDGE
GPS/GNSS module	uBlox ZOE M8G, GPS/GLONASS /GALILEO/ EGNOS	uBlox ZOE M8G, GPS/GLONASS /GALILEO/ EGNOS	uBlox ZOE M8G, GPS/GLONASS /GALILEO/ EGNOS			
External memory	256 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH	256 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH	256 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH	384 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH	384 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH	384 KB RAM 1 MB FLASH 64 MB EXTERNAL FLASH
Bluetooth	BLE 4.1	Standard 2.0	BLE 4.1	BLE 4.2	-	BLE 4.2
Primary power supply	7 ÷ 32 Vdc	7 ÷ 32 Vdc	7 ÷ 32 Vdc	7 ÷ 36 Vdc	7 ÷ 32 Vdc	7 ÷ 36 Vdc
Backup power supply	Internal NiMh (1000mAh)	Internal NiMh (1000mAh)	Internal NiMh (1000mAh)	Internal NiMh (1000mAh)	Internal NiMh (1000mAh)	Internal NiMh (1000mAh)
SIM card	GSM / GPRS SIM card	GSM / GPRS SIM card	GSM / GPRS SIM card	GSM/LTE SIM card	GSM/LTE SIM card	GSM/LTE SIM card
Dimensions	120 x 105 x 45 mm	120 x 105 x 45 mm	120 x 105 x 45 mm			
Working temperature	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +85°C	-20°C÷+80°C	-20°C ÷ +85°C
Installation	Fixed and hidden on board	Fixed and hidden on board	Fixed and hidden on board			
PRODUCT CODE	100893	100917	100936	100941	100942	100943



## **DEVICE ACCESORIES (1)**

TYPE OF ACCESSORIES	CODE	Slimbox 2.0 100903	Slimbox 3.1 100907	Slimbox 3.1 EASY 100938	Slimbox 3.2 100909	SosCall 2.0 100854 VL 100855 SC	Blubox 1.0 100864 VL 1008654 SC	Bbox Can 100923	BluTrack 5.0 1008622	BluTrack 7.0 100914 VL 100915 SC	BluTrack 8.0 100940	RunTracker 6.0 100893	RunTracker 6.1 EASY 100917	RunTracker 6.2 TAPA 2G 100936	RunTracker 6.3 4G 100941	RunTracker 6.4 EASY 4G 100942	RunTracker 6.5 TAPA 4G 100943
KIT CABLE SAFE	500615						V										
KIT CABLE PLUS	500619						V										
KIT K-KEY	500903						V					V		V	V		V
SOS BUTTON	500632						V	V				V	V	V	V	V	V
KIT BATTERY CHARGER BT 5.0	500954								V								
KIT CABLE POWER	1503870											v	V	V	V	V	V
KIT CABLE	1503760		v	V													
KIT CABLE COMMUNICATION	1503880											v	V	V	V	V	V
KIT CABLE I/O	1503890											v		V	V		V
START BUTTON	500542											v		V	V		V
HYPERFREQUENCY	500995											v		V	V		V
BUZZER	500585											v		V	V		V
RFID RECEIVER LF 125 KHZ	1803030							V				V		V	V		v
RFID RECEIVER HF 13,56 MHZ	1803630											v		V	V		V
RFID BADGE	500968											v		V	V		V
RFID TAG	500955											v		V	V		V
ROLLER TAILGATE SWITCH	500982											v	V	V	V	V	V
ANTITHEFT ALARM SIREN	500567											v		v	V		V
SIREN 12/24 V	500991											v		V	V		V
TACHO COMPANY CARD READER	500980													V	V		V
TACHO KIT CONNECTOR FOR RD AND REAL TIME	500977											V	V	V	V	V	V
TACHO NRD CONNECTOR CABLE	500985											V	V	V	V	V	V
TACHO NRD EXTENSION CABLE	500586											V	V	V	V	V	V



## **DEVICE ACCESORIES (2)**

													1				
TYPE OF ACCESSORIES	CODE	Slimbox 2.0 100903	Slimbox 3.1 100907	Slimbox 3.1 EASY 100938	Slimbox 3.2 100909	SosCall 2.0 100854 VL 100855 SC	Blubox 1.0 100864 VL 1008654 SC	Bbox Can 100923	BluTrack 5.0 1008622	BluTrack 7.0 100914 VL 100915 SC	100940	RunTracker 6.0 100893	RunTracker 6.1 EASY 100917	RunTracker 6.2 TAPA 2G 100936	RunTracker 6.3 4G 100941	RunTracker 6.4 EASY 4G 100942	
TEMPERATURE PROBE	500700											V		V	V		V
CABLE TASKER C800 FOR TEMPERATURE PROBE	500975											V		V	V		V
HUMIDITY PROBE	500990											V		V	V		V
HUMIDITY CABLE RJ45 CONNECTOR	501000											V		V	V		V
FMS CANLOGISTIC II	500983							V				V	V	V	V	V	V
FMS CAN-CLICK	500984											V	V	V	V	V	V
FUEL TANK CAP ( KICKON XL 80- SCANIA)	500958											V	V	V	V	V	V
FUEL TANK CAP ( KICKON XL105- VARIOUS MODEL	500959											٧	٧	٧	V	V	V
FUEL TANK ZIPPER WITHOUT LOCK	500960											V	V	V	V	V	V
FUEL TANK ZIPPER WITH LOCK	500961											٧	٧	V	V	V	V
RELAYS 4 CONTACT 24V	501014											V	V	V	V	V	V
RELAYS 4 CONTACT 12V	501015											V	V	V	٧	V	V
RFID RECEIVER	501001											V		V	V		V
RFID TAG	501002											V		V	V		V
GARMIN DEZL580	500997											V		V	V		V
GARMIN DEZL770	500973											V		V	V		V
GARMIN FMI 45 CABLE	500974											V		V	V		V
K-KEY CABLE	1503940											V		V	V		v
KIT-KEY HCS FLEET	500830											V		V	V		V
KIT-KEY HCS SECURITY	500850											V		V	V		V
PERSONAL KEY BLU	500910						V					V		V	V		V
TRASPONDER RECEIVER	500901						V					V	V	V	V		V
DONGLE PRIVATE MODE	1804060		V	V													
SPINA OBD OWA	1803890		V	V													
SECURITY KEY SINGLE	500526											V	V	V	V		V
FLEET KEY SINGLE	500527											V	V	V	V		V



#### INNOVATION | DESIGN | INDUSTRIALIZATION | PRODUCTION

Vem Solutions is an Italian Company with over 45 years of experience in the Research and Development, systems and processes engineering and electronics manufacturing sectors.

Our mission has always been to design, develop and manufacture telematics devices and intelligent sensors equipped with IoT technologies, telematics platforms and services for the B2B/B2B2C world and apps for smartphones and tablets.

Our Company is also focused on the research and development of hardware, firmware and software as well as IT platforms, and offers effective and innovative solutions for both Viasat Group Companies and third parties.





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