



SISTEMA PER VEICOLI DI PRIMO SOCCORSO

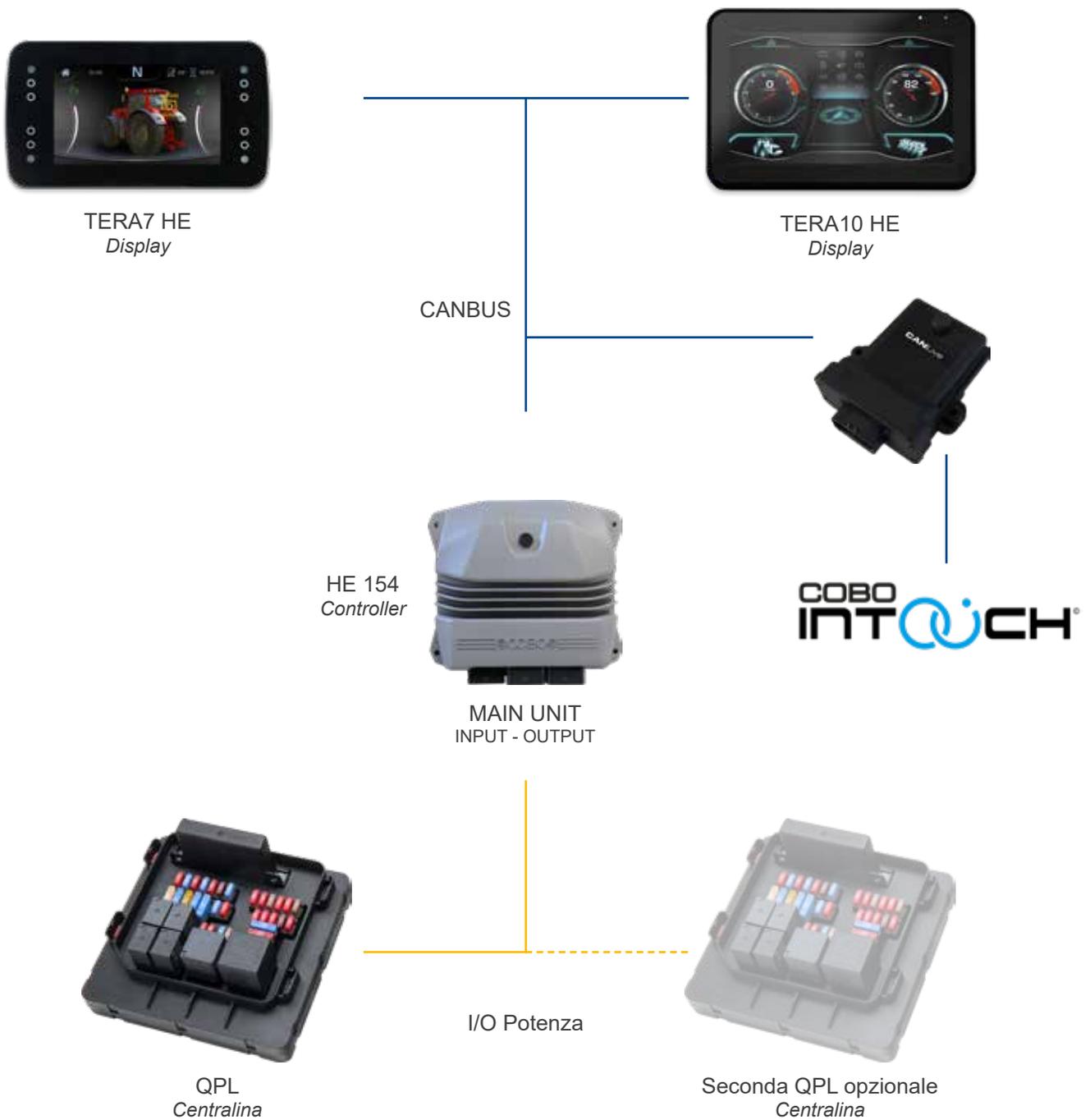
SYSTEM FOR FIRST AID VEHICLES



CONTROL SYSTEM PROPOSAL



CONNECTIVITY CONTROL SYSTEM PROPOSAL



TERA7 HE

TOP EXPERIENCE RIGHT AHEAD

MONITOR CABINA CABIN MONITOR

TERA7 HE è il nuovo display COBO di fascia alta, progettato specificamente per il mercato dei veicoli off-highway, che richiedono un'interfaccia operatore esteticamente gradevole e robusta con grafica di ultima generazione.

Le caratteristiche distintive che lo rendono uno dei display più all'avanguardia offerti al mercato sono:

- Massima leggibilità in qualsiasi condizione di luce
- Grafica veloce e fluida
- Interazione utente ottimale

Progettato secondo i più elevati standard industriali e agricoli per adattarsi al meglio alle applicazioni interno ed esterno cabina di oggi e di domani, con temperature e condizioni meteorologiche severe, radiazioni solari, sostanze chimiche, EMC e vibrazioni.

TERA7 HE is the new COBO high end display, specifically designed for the off-highway vehicles market that requires an aesthetically pleasing and robust operator interface with latest generation graphics.

The distinctive features that make it one of the most advanced displays on the market are:

- Top readability in any light conditions
- Fast and smooth graphics
- Optimal user interaction.

Designed to the highest industrial and agricultural standards to best suit today's and tomorrow's interior and exterior cab applications, including severe temperatures, weather, solar radiation, chemicals, EMC and vibration.



Display

TFT 7" IPS, 800 x 480 pixels
Brightness 1000 cd/m²
Contrast ratio 1200:1
Optical bonding technology



Multitouch capacitivo
Utilizzabile con guanti da lavoro

Capacitive multitouch
Working gloves operable



Orientamento

Orizzontale / Verticale

Orientation

Horizontal / Vertical



CAN BUS
2 porte / 2 ports



Bluetooth
WiFi



Leggibilità al sole
Sun readability



Sensore di temperatura interno
Internal temperature sensor



Accelerometro e
Giroscopio interno
Internal Accelerometer
Gyroscope

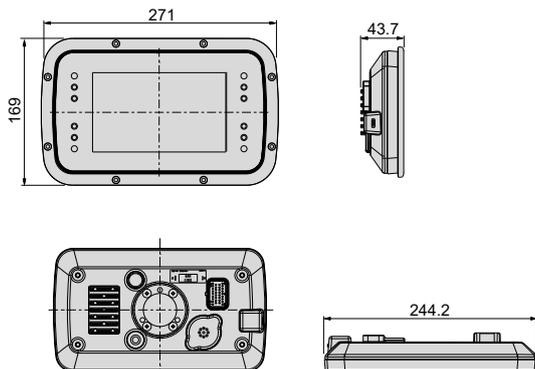


Ram 1GB

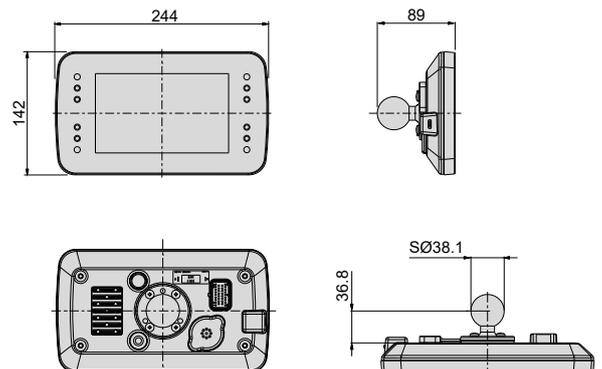
Supply voltage	10 - 32V
Operating temperature	- 30°C + +70°C
Sealing degree	IP66
Main CPU	ARM Cortex-A7 dual + ARM Cortex-M3, 32 bit
Frequency	650MHz
Internal memory	8 GB Flash
Wake up modes	Ignition key, CAN message
RTC	Yes
Boot time	<1 sec. splash screen, <5 sec. full graphic
Keypad	8 touch buttons with backlight
Buzzer	90 dB @ 30 cm
RS232	1
USB ports	1 HOST on housing side 1 OTG connector

Video input	2 Analog PAL/NTSC 1 Digital via BroadR-Reach*
Audio	1 Audio Mic input* 1 Audio LINE Stereo output (not amplified)*
Ethernet	1 BroadR-Reach*
Connector	1 x AMP Superseal 34 pin
Operating system	Linux embedded
Standards	Industrial, road vehicles, agriculture, ISOBUS*
Programming languages	C, C++, QT/QML*
Programming IDE	VT3
I/O List	2 analog inputs 2 digital Inputs 2 RPM inputs 2 Low Side outputs 1A 2 High Side outputs-1A

FISSAGGIO INDASH / INDASH FIXING



FISSAGGIO OUTDASH / OUTDASH FIXING



TERA10HE

TOP EXPERIENCE RIGHT AHEAD

MONITOR VANO SANITARIO SANITARY COMPARTMENT MONITOR

TERA10 HE è il display più avanzato per il mercato off-highway. Utilizza un processore multimediale fino a quattro core.

Le caratteristiche distintive di questo prodotto sono:

- Fluidità grafica
- Facile interazione utente
- Visibilità massima
- Connettività avanzata
- Look stile tablet

che unite a standard di progetto specifici, lo rendono particolarmente adatto ai veicoli di soccorso, stradali, industriali ed agricoli.

Supporta le librerie grafiche QT/QML che garantiscono un livello di performance ottimale del software con favolose interfacce grafiche.

TERA10 HE può essere installato sia ad incasso che a sbalzo tramite supporto specifico.

TERA10 HE is the high end display solution for off-highway market. Uses a multimedia processor up to quad core.

The distinguishing characteristics of these product are:

- Smooth graphic
- Easy user interaction
- Maximum visibility
- Advanced connectivity
- Tablet-style look

which, combined with specific project standards, make it particularly suitable for emergency, industrial, road and agricultural vehicles.

Supports QT/QML graphics libraries which guarantee a level of optimal software performance with fabulous graphical interfaces.

TERA10 HE can be installed both indash and outdash with his specific articulated support.



Display

TFT 10.1", 1280 x 800 pixels
850 cd/m²
Contrast ratio 800:1



Multitouch capacitivo
Utilizzabile con guanti da lavoro

Capacitive multitouch
Working gloves operable



Orientamento

16:10, Orizzontale/Verticale

Orientation

16:10, Horizontal / Vertical



CAN BUS
4 or 2 porte / 4 or 2 ports



Bluetooth
WiFi



Leggibilità al sole
Sun readability



Sensore di temperatura interno
Internal temperature sensor



Accelerometro e
Giroscopio interno
Internal Accelerometer
Gyroscope



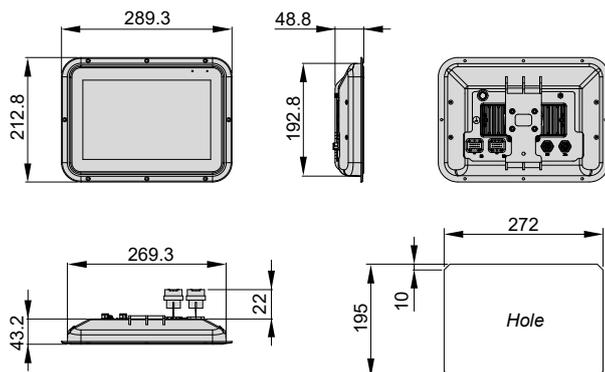
Ram 1GB

Supply voltage	8 - 32V	Video input	4 PAL /NTSC or 2 PAL/NTSC simultaneous Video over IP
Operating temperature	- 30°C + +70°C	RS232	1 port full modem 1 port Linux Terminal
Sealing degree	IP65	Connector	2 x AMP automotive 26 pin (signal) 2 x M12 8 pin (video camera)
Main CPU	NXP i.MX6 Dual Core ARM Cortex-A9, 32 bit	Standards	EN 61000 industrial; ECE R10 automotive ISO 14982 agriculture; ISO 1173 ISOBUS
Frequency	800MHz	Programming languages	C, C++, QT/QML
Internal memory	8 GB Flash	Programming IDE	VT3, QT CREATOR
Wake up modes	Power supply, CAN message, ignition key	Ethernet	1 port 10/100
RTC	Yes	Operating system	Linux embedded
Boot time	5 sec from cold boot		
Buzzer	93 dB, volume adjustable		
USB ports	1 HOST external (BUTTONS VERSION) 2 HOST on connector 1 OTG Device on connector		

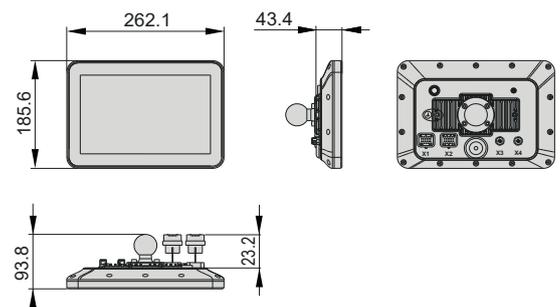
PERIFERICHE GESTITE - MANAGED PHERIPHERALS

- Lampeggianti - *Beacon*
- Fari da lavoro - *Worklamps*
- Proiettori - *Headlamps*
- Tergicristallo - *Wind screen wiper*
- Lavacristallo - *Wind screen washer*
- Riscaldamento parabrezza - *Wind screen heating*
- Fendinebbia - *Fog light*
- Retronebbia - *Rear fog light*
- Illuminazione interno cabina - *Cabin interior lighting*

FISSAGGIO INDASH / INDASH FIXING



FISSAGGIO OUTDASH / OUTDASH FIXING



HE154

SAFETY GLOBAL CONTROLLER NEW ADVANCING

La centralina HE154 utilizza il microcontrollore AURIX di Infineon che unisce la potenza di calcolo dei 3 core di ultima generazione insieme alla tecnologia Lock-step per l'esecuzione delle applicazioni dove la "Functional Safety" è richiesta.

Ha come base di progetto gli standard industriali, agricoli, dei veicoli stradali, delle macchine da cantiere.

Possono essere utilizzate in tutte le applicazioni ove è richiesto un controllore Safety:

- con elevata potenza di calcolo;
- con alta potenza di attuazione della movimentazione idraulica ed elettrica;
- con avanzata connettività CAN Bus e Ethernet / BroadR-Reach.

The HE154 controller uses the Infineon AURIX microcontroller that combines the computing power of its 3 latest generation cores together with the Lock-step technology for the execution of applications where the "Functional Safety" is required.

They have as a basis the industrial, agricultural, road and vehicles, construction machinery standards.

They can be used in all applications where has a Safety controller required:

- *with top computing power;*
- *with high power for hydraulic and electrical movement;*
- *with CAN Bus and Ethernet / BroadR-Reach advanced connectivity.*



Lock-step
technology



High electrical
and hydraulic
execution power



Advanced
CAN Bus
connectivity



Computing
power

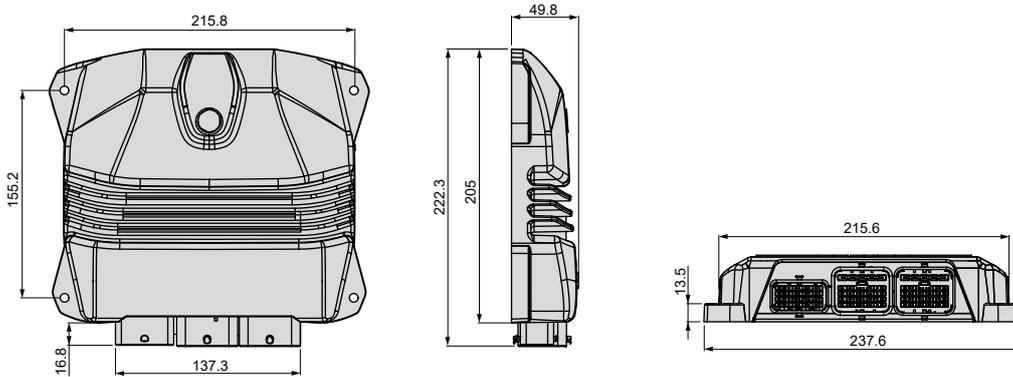


Advanced Ethernet
and BroadR-Reach
connectivity



ECE R10
ISO 14982
EN 61000
EN 13766

Supply voltage	8 - 32 V	ETH / BRR	Yes (Ethernet or BroadR-Reach are alternative)
Operating temperature	- 40°C + + 85°C	CAN	5
Sealing degree	IP66	RS232	1
CORE	1 Lockstep core + 2 Cores 300 MHz 32 bit	USB	1
FRAM	32 KB	Sens Supply	5V @ 1A
FLASH	8 MB + 64 MB	Ignition KEY IN	1
RAM	768 KB + 2 MB	EMC Immunity	100V / m
RTC	Yes	<i>I/O List</i>	16 x analog V or R + 16 x analog V or mA
Internal temperature sensor	Yes		16 x HiLo FREQ + 16 x analog read
Accelerometer	Yes, dual		20 x 3A with Current Loop
Safety	IEC 61508 SIL2 ISO EN 13849 PL d ISO 25119 AgPL d		20 x 5A HS OUT
			8 x 3A with Current Loop
		8 x 5A LS OUT	
		2 analog OUT	
			More than 60A TOT current



QPL - M (QUICK POWER LINK - MEDIUM)

PRESS - FIT TECHNOLOGY

La QPL è una scheda per la gestione dell'alimentazione elettrica completa di relè e fusibili.

Razionalizza i cablaggi per la distribuzione della potenza elettrica nei veicoli.

La QPL può essere equipaggiata con il modulo di controllo intelligente "Liberty Link" che sfrutta la rete CAN BUS per la gestione dei relè.

La Liberty Link è programmabile tramite tool VT3. 

Le versioni qui presentate sono degli standard.

Versioni personalizzate possono essere sviluppate secondo le specifiche necessarie applicazioni.

The QPL is a board for the electrical power management complete of relays and fuses.

The QPL streamlines the wiring harnesses for the distribution of the electrical power into vehicles.

The QPL can be equipped with the intelligent control module "Liberty Link" which uses the CAN BUS network to handle the relays.

The Liberty Link is programmable via the VT3 tool. 

The versions presented here are the standard.

The customized versions can be developed according to necessary specific applications.



Montaggio facile e veloce

Quick and easy installation



Risparmio di spazio e riduzione cablaggi

Space saving and reduction to wiring harnesses

CAN

Terminazione CAN BUS
120 Ohm resistore a bordo

*CAN BUS Terminating
120 Ohm resistor on board*



Facile connessione
Easy connection



Terminali di potenza
Power terminals

M6 alimentazione della batteria
M6 battery power supply

M5 alimentazione interruttore a chiave
M5 key switch power supply



Fusibili | Fuses

N° 5 Unival Fuses max 30A
N° 20 Minival Fuses max 15A



CE Compliance
ISO 14982
EN 13309

Radio Disturbance Conformity
CISPR 25

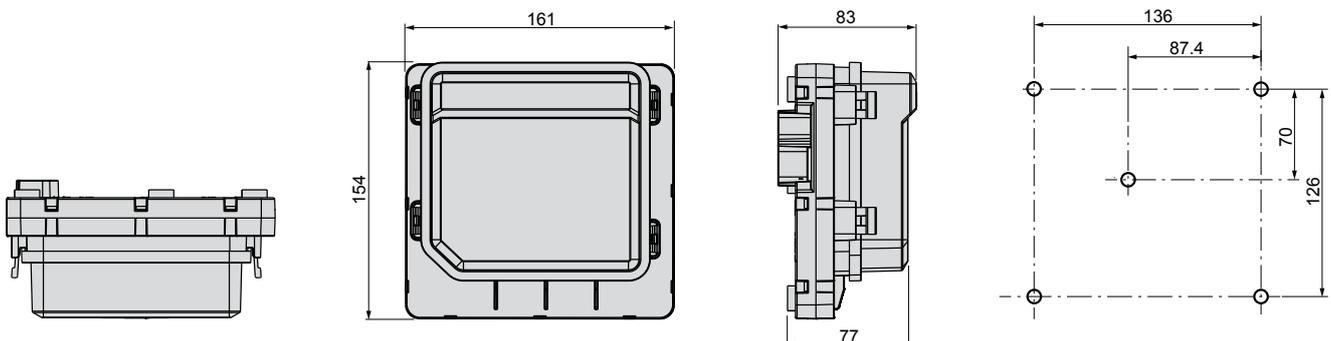
Environmental test
EN 60068-2-1
EN 60068-2-2
EN 60068-2-6
EN 60068-2-27



Power supply	12 or 24V
Operating temperature	- 30°C ÷ + 80°C
Sealing degree	IP42 with connectors properly plugged
Self-extinguishing	UL 94V-0
Electrical performance	ISO 7637
Fuses	N° 5 Unival Fuses max 30A N° 20 Minival Fuses max 15A
Liberty Link	N° 1 CAN BUS communication module
Relays	N° 4 locations for micro relays (10/20A on 12Vdc version - 8/15A on 24Vdc version) N° 2 location for mini relays (30/40A on 12Vdc version - 10/20A on 24Vdc version) or Cobo electronic units (max 9 pins connected) N° 11 PCB relays (10/15A on 12Vdc version)
Connector Input/Output plugs housing	X10 = 9 positions MCP 2.8 Tyco ref. 8-0968971-1 X11 = 6 positions MCP 2.8 Tyco ref. 8-0968970-2 X12 = 21 positions MCP 2.8 Tyco ref. 8-0968975-2 X13 = 12 positions MCP 2.8 Tyco ref. 8-968972-2 X14 = 18 positions MCP 2.8 Tyco ref. 8-0968974-1 X15 = 8 position Minifi ref. 5557-08R-210 X15 = 8 position Minifi ref. 5557-08R-210 X16 = 6 position Minifit ref. 5557-06R-210 X17 = 22 position Minifit ref. 5557-22R-210



- Micro relè - *Micro relays*
- Mini relè - *Mini relays*
- Fusibili Unival - *Unival Fuses*
- Fusibili Minival - *Minival Fuses*
- Liberty link
- Fusibili di riserva - *Reserve fuses*



“CANLive 3.0”

DISPOSITIVO TELEMATICO CON INTERFACCIA CAN BUS,
CONNETTIVITÀ 4G LTE E LOCALIZZAZIONE GPS - GLONASS

*TELEMATIC DEVICE WITH CAN BUS INTERFACE,
4G LTE CONNECTIVITY AND GEOLOCATION GPS - GLONASS*

APPLICAZIONI

- Sistema di monitoraggio in tempo reale per macchine con reti CAN BUS
- Built-in “data logger” registrazione continua CAN BUS event IDs
- Parametri di monitoraggio programmabili su piattaforma CLOUD
- Sistema per modifica parametri macchina da remoto
- Stack completo J1939 protocollo multi-packet
- Certificato COBO di sicurezza SSL
- Protocolli supportati: Winloader, KWP2000 and Winloader TERA
- Possibilità di aggiornamento SW e FW da remoto per dispositivi COBO
- FOTA: Firmware Over the Air

APPLICATIONS

- Real time monitoring system for CAN BUS machines
- Built-in “data logger” recording CAN BUS event IDs
- Programmable monitoring parameters on CLOUD platform
- System for changing machine parameters remotely
- Full stack J1939 multi-packet protocol
- SSL security COBO certificate
- Upload supported protocols: Winloader, KWP2000 and Winloader TERA
- Possibility of remote SW and FW upgrade system for COBO device
- FOTA: Firmware Over the Air



2 MB Flash
256 + 4 KB RAM



2 CAN-bus 2.0B high speed,
ISO 11898-2 compliant
1 RS 232 Tx and RX line



LTE FDD Cat.1. 3GPP release
10 compliant DC-HSPA+ 42 Mbps
Built in UDP/TCP/FTP/SMTP stack



Clock / calendar with 240 x 8 bit
RAM with back-up battery

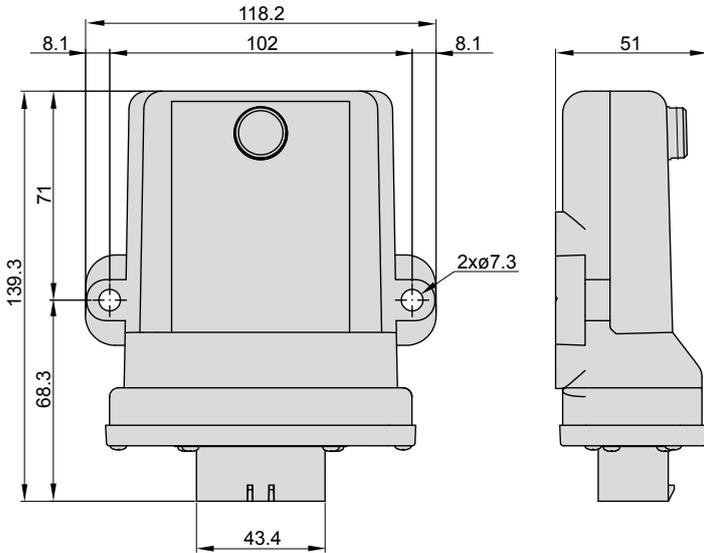


Simultaneous support of GPS, Glonass,
Beidou, Galileo, QZSS module with
embedded patch antenna, with 33 channels
(tracking) and 99 (acquisition channel)



CE FCC RED UKCA E-mark

Shock tests - Reference standard
EN 60068-2-27
Random vibration tests - Internal Reference
Climatic tests - Reference standard
EN 60068-2-1 and EN 60068-2-2
UKCA



Supply voltage	9 - 36 VDC direct from battery
Operating temperature	- 40°C + + 85°C
Sealing degree	IP67 minimum
Accelerometer	Internal accelerometer 3 axis
Frequency	180 Mhz
Data Flash	128 MB serial Flash
Microprocessor	ARM Cortex M4 core ARM® 32-bit Cortex®-M4
Connector	AMP 23 pin 776087-1
Housing	ABS enforced PA66
Wi-Fi	802.11b/g/n access point (AP) supporting up to four stations - IPv4 and IPv6 TCP/IP stack - Powerful Crypto Engine - TLS and SSL Connections - Wi-Fi Direct® client/group owner - WPA2 Personal and Enterprise Security

MODELLI DISPONIBILI
MODELS AVAILABLE

Modello Model	Modem	WiFi	Data memory
CANLive 4G	LTE FDD Cat.1	No	128MB
CANLive 4G Wi-Fi	LTE FDD Cat.1	Yes	128MB

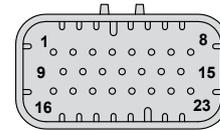
INTERCAMBIABILE CON I SEGUENTI MODELLI
INTERCHANGEABLE WITH FOLLOWING MODELS

Modello / Model	P/N
CANLive 1.0	1086916
CANLive 2.0	1088575

MANUALE TECNICO D'INSTALLAZIONE
INSTALLATION USER MANUAL



FRONT VIEW
NUMBER PIN POSITION



Pin	Funzioni Functions	Descrizioni Descriptions
1	+VB 30	Logic power supply (+12V / + 24V)
2	-VB 31	Logic ground
3	Key +15	Key input
4	RS232_TX	Line RS-232_TX
5	RS232_RX	Line RS-232_RX
6	CAN 0 - L	CAN Line interface 1 (low)
7	CAN 0 - H	CAN Line interface 1 (high)
8	CFG1	Configuration pin 1
9	CAN 1 - L	CAN Line interface 2 (low)
10	CAN 1 - H	CAN Line interface 2 (high)
11	CFG2	Configuration pin 2
12	N.C.	N.C.
13	GND	Ground signal
14	INP 1	Analog Input 0 - 5V / 0 - 30V or digital input
15	INP 2	Analog Input 0 - 5V / 0 - 30V or digital input
16	INP 3	Analog Input 0 - 5V / 0 - 20mA or digital input
17	INP 4	Analog Input 0 - 5V / 0 - 20mA or digital input
18	INP 5	Input rpm and digital
19	INP 6	Input rpm and digital
20	Output 1	On/Off high side. 2A max
21	Output 2	On/Off high side. 2A max
22	Output 3	On/Off low side. 1A max
23	Output 4	On/Off low side. 1A max

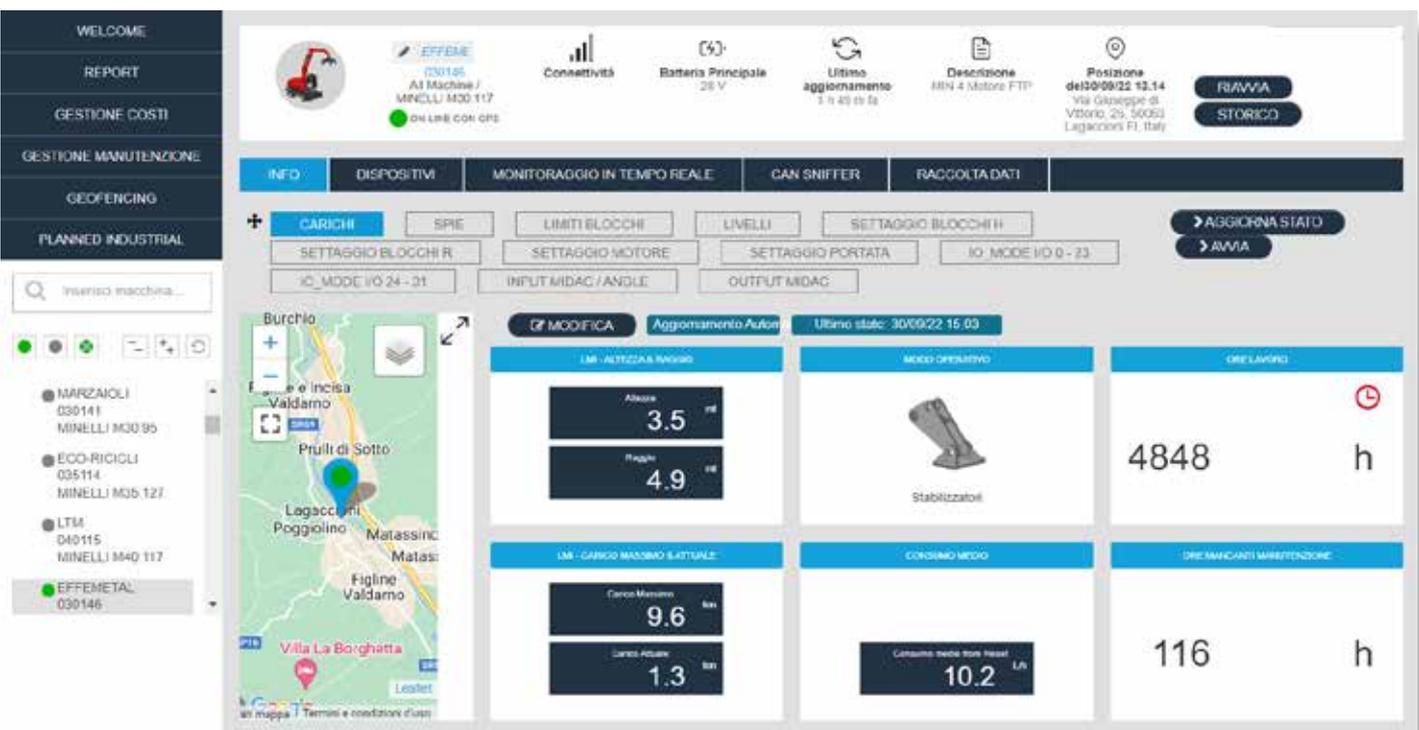
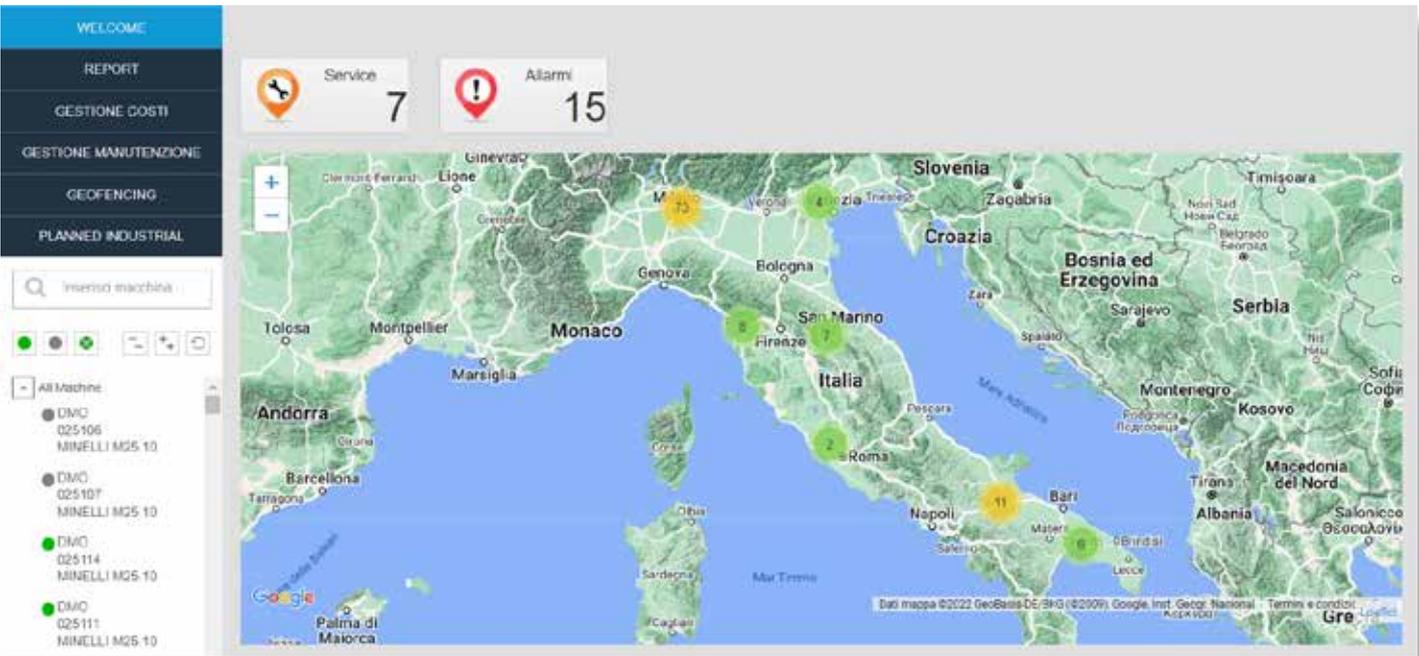
COBO INTOUCH®

DATA PLATFORM



Layout accattivante e facile da usare (personalizzabile)
 Design flessibile per PC, smartphone e tablet (responsive)
 Compatibile con sistema operativo Microsoft Windows, iOS e Android
 Piattaforma multilingua, Portale web personalizzabile con colori e loghi
 Autenticazione utente sicura (HTTPS) e SSL

Attractive and user friendly layout (customizable)
 Flexible design for PC, smartphone and tablet (responsive)
 Compatible with Microsoft Windows, iOS and Android operating system
 Multilanguage platform
 Web portal customizable with colours and logos
 Secure User authentication (HTTPS) and SSL



COBO
INT@UCH®

INTELLIGENCE ANALYSIS



- Monitoraggio continuo e gestione delle funzioni da remoto
- *Continuous monitoring and management of functions remotely*



- Raccolta e gestione dei dati statistici e di efficienza
- Assistenza tecnica immediata in caso di imprevisti
- Manutenzioni predittive e preventive
- *Collection and management of statistical and efficiency data*
- *Immediate technical assistance in case of unexpected events*
- *Predictive and preventive maintenance*



- Invia elenco di attività in remoto per la pianificazione delle attività
- Un avanzato sistema di localizzazione GPS per la gestione dei flussi operativi
- Soccorso e monitoraggio immediati in caso di incidenti
- *Send task list remotely for task scheduling*
- *An advanced GPS tracking system for fleet management*
- *Immediate rescue and monitoring in case of accidents*

GERMANY

COBO DEUTSCHLAND GmbH
 Zum Schürmannsgraben, 12E
 D-47441 - Moers
 Germany
 Phone: +49 (0) 2841 88238 0
 Fax: +49 (0) 2841 88238 23
 E-mail: info@cobogroup.net
 Web Site: www.cobo-deutschland.com

FRANCE

COBO FRANCE Sarl
 Allée de l'Europe, 2 - Zone Coriolis
 71210 - Ecuisses
 France
 Phone: +33 (0) 3 857 30560
 Fax: +33 (0) 3 857 85606
 E-mail: info@cobogroup.net
 Web Site: www.cobofrance.com

NORTH AMERICA

COBO USA Ltd
 West Division Street, 304
 52655 - West Burlington
 Iowa - Usa
 Phone: +1 319 754 5585
 Fax: +1 319 754 8724
 E-mail: info@cobogroup.net
 Web Site: www.cobointernational.com

LATIN AMERICA

COBO COMPONENTES AGR. E IND. Ltda
 Rua Dona Francisca, 8300 - Bloco 2-M
 89219-600 Zona Industrial - Joinville
 Santa Catarina - Brasil
 Phone: +55 47 3305 0095
 E-mail: info@cobogroup.net
 Web Site: www.cobogroup.net

OCEANIA

COBO OCEANIA Ltd
 Maiella Street, 4/12
 4207 Stapylton - Brisbane
 Queensland - Australia
 Phone: +61 (0) 7 3807 4866
 Fax: +61 (0) 7 3807 6780
 E-mail: info@cobogroup.net
 Web Site: www.cobo.com.au

SOUTH-EAST ASIA

COBO ASIA Ltd
 Wai Yip Street, 133
 11/F, 12/F and Roof Floor - Kwun Tong
 Hong Kong
 Phone: +852 3511 6708 (6709)
 E-mail: info@cobogroup.net
 Web Site: www.cobogroup.net

CHINA

COBO GUANGZHOU Ltd
 101/102 Building 7, Shi Dai Fang Zhou
 30 Hua Zhou Road, Haizhu District
 510220 - Guangzhou
 People's Republic of China
 Phone: +86 20 8922 5611
 Fax: +86 20 8922 5635
 E-mail: info@cobogroup.net
 Web Site: www.cobogroup.net

INDIA

COBO INDIA Branch Office
 Mathura Road, 13/6 - 4th floor, 403
 121003 NH-2 - Faridabad
 Haryana - India
 Phone: +91 129 4871206
 Email: info@cobogroup.net
 Web Site: www.cobogroup.net

**C.O.B.O. SpA**

Via Tito Speri, 10
 25024 Leno (Brescia) ITALY
Phone +39 030 90451
Fax +39 030 9045330



info@cobogroup.net | www.cobogroup.net

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