



TERA10 HE

10.1" TFT

TERA12 HE

12.1" TFT

HIGH END DISPLAY





SW di programmazione
SW programming tool

VT3 è un potente software per il controllo delle unità e dei display programmabili COBO.

Usando VT3, l'utente programmatore può:

1. Sviluppare la logica di controllo del software applicativo secondo IEC61131:
 - a. programmare le unità organizzate in PROGRAM, FUNCTION, FUNCTION_BLOCK
 - b. controllo di cicli e operazioni
 - c. variabili globali di tutti i tipi di dati specificati da IEC61131
2. Definire i messaggi CANBUS per la comunicazione con altri dispositivi
3. Definire la configurazione dei segnali di input e output
4. Usare 4 differenti linguaggi di programmazione:
 - a. FBD: Function Block Diagram
 - b. LD: Ladder Diagram
 - c. ST: Structured Text
 - d. "C": disponibile anche il linguaggio "C" a basso livello
5. Avere uno strumento per display grafici WYSIWYG:
 - a. importare formati d'immagine (bmp, png, gif,....)
 - b. usare font windows
 - c. progettare oggetti grafici (gauge, testi, istogrammi,

VT3 is a powerful tool for the control of COBO programmable units and displays.

With VT3, the developer can:

1. *Program controllers using IEC1131 standards:*
 - a. *programming using PROGRAM, FUNCTIONS and FUNCTION_BLOCKS modules*
 - b. *cycles and Timers*
 - c. *all variables and data specified by IEC1131*
2. *CANBUS data definition for network communication*
3. *I/O mapping definition*
4. *4 different programming languages:*
 - a. *FBD: Function Block Diagram*
 - b. *LD: Ladder Diagram*
 - c. *ST: Structured Text*
 - d. *"C"/"C++" language*
5. *WYSIWYG display graphic tool:*
 - a. *importing images formats (bmp, png, gif,....)*
 - b. *windows fonts*
 - c. *graphic objects (gauges, text, hystograms,*

TERA10 HE TERA12 HE



TERA10 HE e TERA12 HE sono i display più avanzati nel mercato off-highway. Utilizzano il processore NXP i.MX6 (TM), che unisce le caratteristiche di multimedialità avanzata a gestione grafica.

Permettono fluidità della grafica, facile interazione utente, visibilità massima e connettività avanzata con un look stile tablet, sempre avendo come base di progetto gli standard industriali.

TERA10 HE e TERA12 HE possono essere installati sia ad incasso che a sbalzo tramite supporto specifico.

TERA10 HE and TERA 12 HE are the high end display solution for off-highway market. They use a NXP i.MX6 (TM) processor, that join strong multimedia capabilities and graphics management.

They allow smooth graphics, easy user interaction, top readability and advanced connectivity, with a tablet style looking, always keeping the industrial standards as base of design.

TERA10 HE and TERA 12 HE can be installed both indash and outdash with their specific articulated supports.

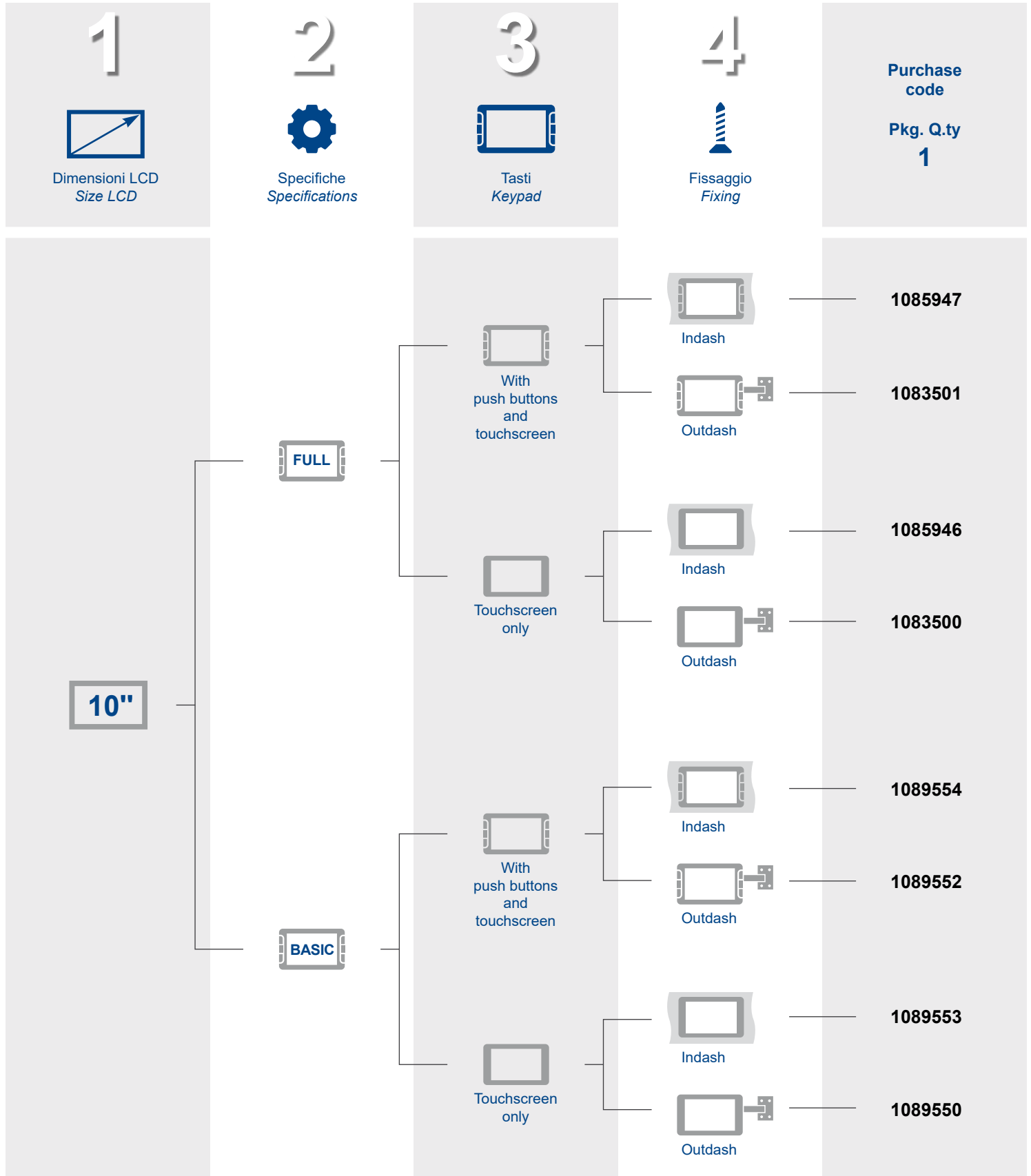


**CAN J1939
ISOBUS - ISO11783**



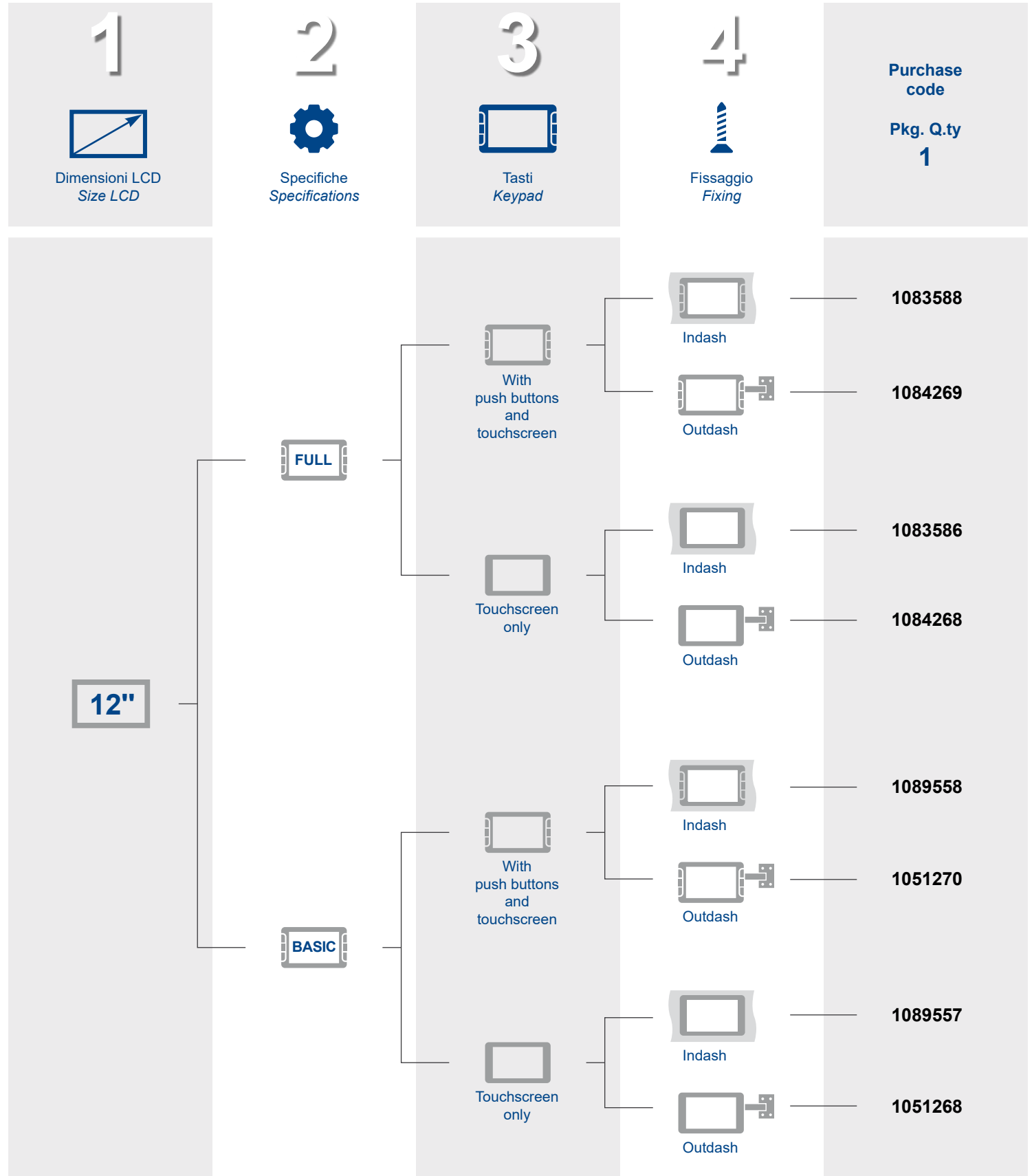
GUIDA ALLA COMPOSIZIONE DEL MODELLO / GUIDE FOR THE MODEL COMPOSITION

TERA10 HE 10.1" TFT DISPLAY



GUIDA ALLA COMPOSIZIONE DEL MODELLO / GUIDE FOR THE MODEL COMPOSITION

TERA12 HE 12.1" TFT DISPLAY



SPECIFICHE TECNICHE

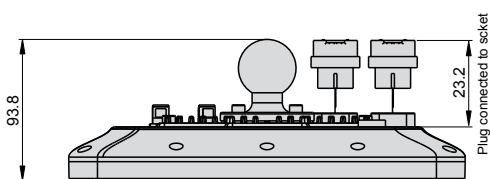
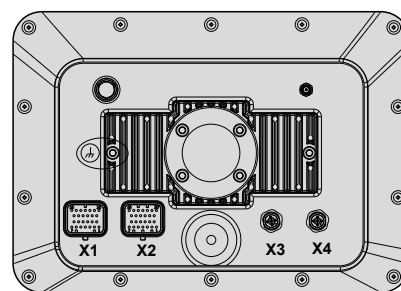
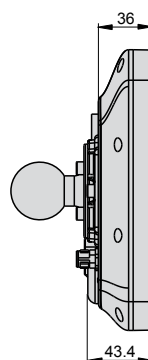
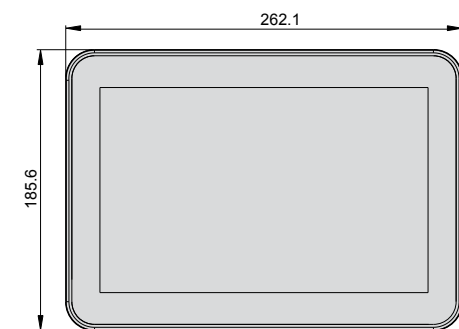
	FULL version	BASIC version
Alimentazione	8 - 32V	8 - 32V
Temperatura di funzionamento	- 30°C ÷ +70°C	- 30°C ÷ +70°C
Grado di protezione	IP65	IP65
Processore	NXP i.MX6 Dual Core ARM Cortex-A9, 32 bit	NXP i.Mx6 Dual Core ARM Cortex-A9, 32 bit
Frequenza	800Mhz	800Mhz
Memoria interna	8 GB Flash	8 GB Flash
RAM	1 GB	1 GB
Display	TERA10 HE: TFT 10.1", 1280 x 800 pixels, 850 cdm, 800:1 rapp. Contrasto TERA12 HE: TFT 12.1", 1280 x 800 pixels, 500 cdm, 750:1 Contrasto	TERA10 HE: TFT 10.1", 1280 x 800 pixels, 850 cdm, 800:1 rapp. Contrasto TERA12 HE: TFT 12.1", 1280 x 800 pixels, 500 cdm, 750:1 Contrasto
Display Mode	16:10, Portrait/Landscape	16:10, Portrait/Landscape
Visibilità al sole	✓	✓
Touchscreen	Multitouch capacitivo con tecnologia bonding (funzionamento con guanti)	Multitouch capacitivo con tecnologia bonding (funzionamento con guanti)
RTC	✓	✓
Wake up mode	Alimentazione, messaggio CAN, ingresso chiave	Alimentazione, messaggio CAN, ingresso chiave
Tempo di boot	5 sec da cold boot	5 sec da cold boot
Sensore temperatura interna	✓	✓
Accelerometro/Giroscopio	✓	✓
Tasti	4+4 tasti frontali 1 tasto programmabile come ON/OFF (VERSIONE CON TASTI)	4+4 tasti frontali 1 tasto programmabile come ON/OFF (VERSIONE CON TASTI)
Buzzer	93 dB, volume regolabile	93 dB, volume regolabile
Porte CAN BUS	4	2
RS232	1 port full modem 1 port Linux Terminal	1 port full modem 1 port Linux Terminal
Porte USB	1 HOST esterna (VERSIONE CON TASTI) 2 HOST su connettore 1 OTG Device su connettore	1 HOST esterna (VERSIONE CON TASTI) 2 HOST su connettore 1 OTG Device su connettore
Video Input	4 PAL/NTSC in contemporanea Video over IP	2 PAL/NTSC in contemporanea Video over IP
Ethernet	1 port 10/100	1 port 10/100
Audio	1 Audio input 1 Audio output (non amplificato)	✗
GPS	1 ricevitore con antenna esterna (3 mt precisione)	✗
Bluetooth	✓	✗
Wi-Fi	✓	✗
Lista I/O	4 ingressi analogici/digitali RPM 2 uscite Low/High Side 1A 1 uscita Low Side 0.5A	✗
Connettori	2 x AMP automotive 26 pin (segnali) 2 x M12 8 pin (video camera)	2 x AMP automotive 26 pin (segnali) 1 x M12 8 pin (video camera)
Sistema operativo	Linux embedded	Linux embedded
Standards	Industriale EN 61000; Automotive ECE R10; Agricolo ISO 14982; ISOBUS ISO 1173	Industriale EN 61000; Automotive ECE R10; Agricolo ISO 14982; ISOBUS ISO 1173
Linguaggi di programmazione	C, C++, QT/QML	C, C++, QT/QML
Programming IDE	VT3, QT CREATOR	VT3, QT CREATOR



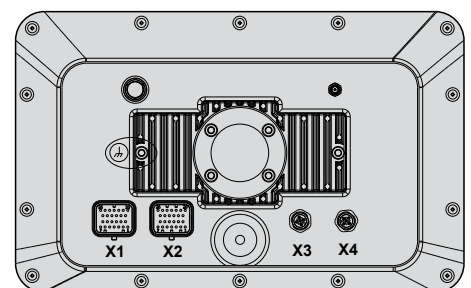
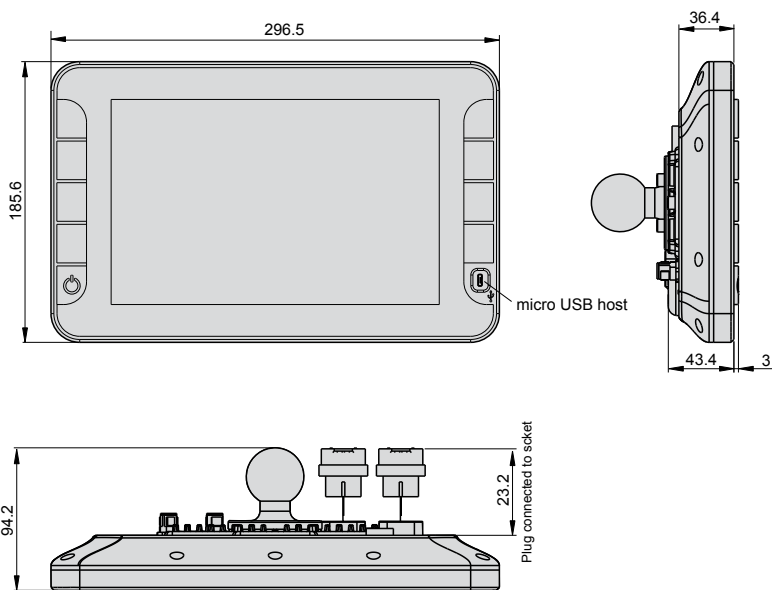
TECHNICAL SPECIFICATIONS

	FULL version	BASIC version
Power supply	8 - 32V	8 - 32V
Operative temperature	- 30°C ÷ +70°C	- 30°C ÷ +70°C
Sealing degree	IP65	IP65
Main CPU	NXP i.MX6 Dual Core ARM Cortex-A9, 32 bit	NXP i.MX6 Dual Core ARM Cortex-A9, 32 bit
Frequency	800Mhz	800Mhz
Internal memory	8 GB Flash	8 GB Flash
RAM	1 GB	1 GB
Display	TERA10-HE: TFT 10.1", 1280 x 800 pixels, 850 cdm, 800:1 contrast ratio TERA12-HE TFT 12.1", 1280 x 800 pixels, 500 cdm, 750:1 contrast ratio	TERA10-HE: TFT 10.1", 1280 x 800 pixels, 850 cdm, 800:1 contrast ratio TERA12-HE TFT 12.1", 1280 x 800 pixels, 500 cdm, 750:1 contrast ratio
Display Mode	16:10, Portrait/Landscape	16:10, Portrait/Landscape
Sun readability	✓	✓
Touchscreen	Capacitive multitouch with bonding technology (gloves compatible)	Capacitive multitouch with bonding technology (gloves compatible)
RTC	✓	✓
Wake up mode	Power supply, CAN message, ignition key	Power supply, CAN message, ignition key
Boot time	5 sec from cold boot	5 sec from cold boot
Internal temperature sensor	✓	✓
Internal accelerometer /gyroscope	✓	✓
Keys	4+4 push button on front panel 1 push button programmable also as ON/OFF (BUTTONS VERSION)	4+4 push button on front panel 1 push button programmable also as ON/OFF (BUTTONS VERSION)
Buzzer	93 dB, volume adjustable	93 dB, volume adjustable
CAN BUS ports	4	2
RS232	1 port full modem 1 port Linux Terminal	1 port full modem 1 port Linux Terminal
USB ports	1 HOST external (BUTTONS VERSION) 2 HOST on connector 1 OTG Device on connector	1 HOST external (BUTTONS VERSION) 2 HOST on connector 1 OTG Device on connector
Video Input	4 PAL/NTSC simultaneous Video over IP	4 PAL/NTSC simultaneous Video over IP
Ethernet	1 port 10/100	1 port 10/100
Audio	1 Audio input port 1 Audio output port (not amplified)	✗
GPS	1 receiver with external antenna (3 mt accuracy)	✗
Bluetooth	✓	✗
Wi-Fi	✓	✗
I/O List	4 analog/digital Inputs RPM 2 Outputs Low/High Side 1A 1 Output Low Side 0.5A	✗
Connector	2 x AMP automotive 26 pin (signal) 2 x M12 8 pin (video camera)	2 x AMP automotive 26 pin (signal) 1 x M12 8 pin (video camera)
Operating System	Linux embedded	Linux embedded
Standards	EN 61000 industrial; ECE R10 automotive ISO 14982 agriculture; ISO 1173 ISOBUS	EN 61000 industrial; ECE R10 automotive ISO 14982 agriculture; ISO 1173 ISOBUS
Programming languages	C, C++, QT/QML	C, C++, QT/QML
Programming IDE	VT3, QT CREATOR	VT3, QT CREATOR

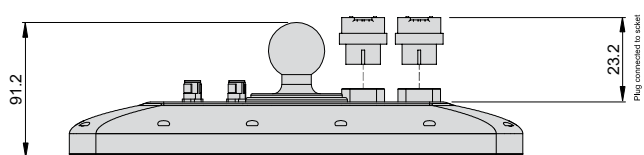
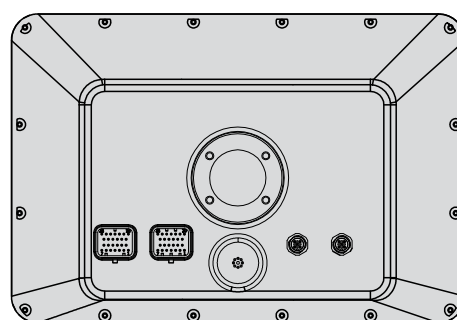
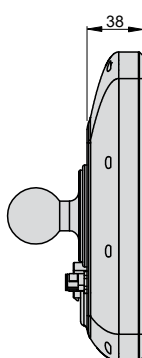
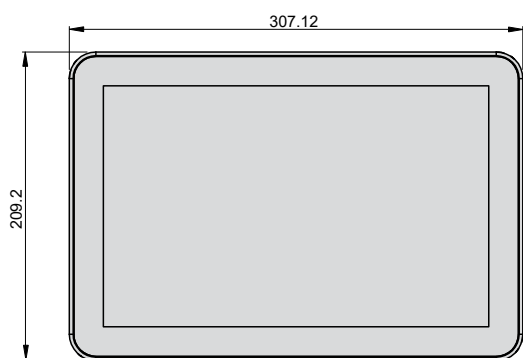
TERA10 HE TOUCHSCREEN ONLY



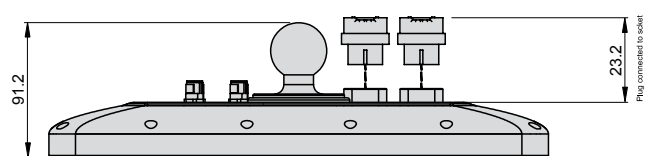
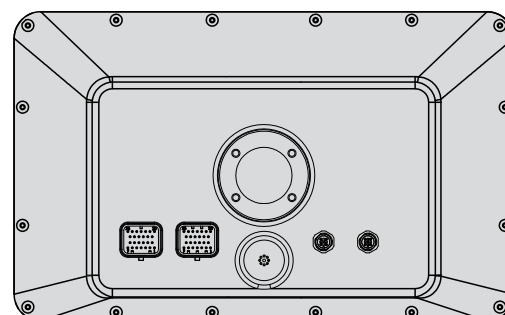
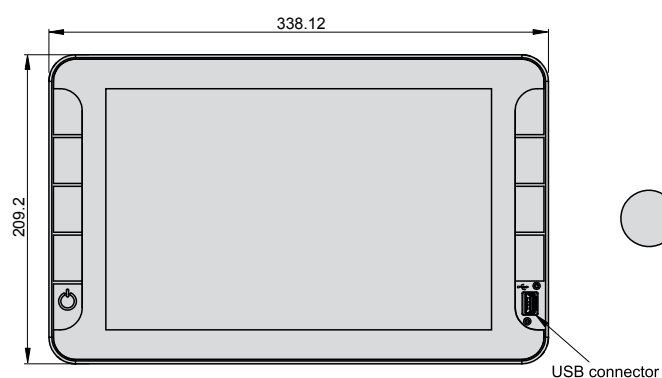
TERA10 HE WITH PUSH BUTTONS AND TOUCHSCREEN



TERA12 HE TOUCHSCREEN ONLY



TERA12 HE WITH PUSH BUTTONS AND TOUCHSCREEN



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