



## Facts

### General description

Part number	640014405
Life cycle status	Active
Warranty	2 year

### Certifications

General	CE, FCC, KCC, UL 61010-2-201, UL 746C
Hazardous	ULC1D2, ATEX (Zone2), ATEX (Zone22), IECEx (Zone2), IECEx (Zone22)
Marine	KR, LR, ABS, CCS, BV, NK, DNV GL, RS

### Mechanical

Mechanical size	340 x 242 x 69mm
Mounting option	Panel Mount
Number of touches	1 million finger touch operations
Touch type	Resistive
Cut-out size	324 x 226mm
Weight	2.8 kg
Housing material	Powder-coated aluminum, Black

### Power

Input voltage	24 VDC (18 to 32 VDC) CE: The power supply must conform with the requirements according to IEC 60950 and IEC 61558-2-4. UL and cUL: The power supply must conform with the requirements for class 2 power supplies.
Power consumption (max)	23 W
Input fuse	Internal DC fuse

### System

CPU	i.MX6Quad, Quad ARM Cortex-A9 1.0GHz 1MB L2 cache
RAM	2 GB
FLASH	4GB SSD (eMMC), 3.5GB free for application

## X2 extreme 12 HP

### 12" Rugged HMI with iX runtime

1280 x 800 pixel (16:10) TFT-LCD touch screen
High brightness display
2 GB application memory
Ethernet 2x100 Mbit
-30°C to +70°C operating temperature
DNV GL, KR, LR, ABS, CCS, BV, NK, RS marine approvals
UL Class I Div 2, ATEX/IECEX Zone 2,22

### Serial communication

Number of serial ports	2 Port 9pin DSUB
Serial port 1	RS 232 (RTS/CTS)
Serial port 2	RS422/RS485/CAN
Serial port 3	RS485/CAN

### Ethernet communication

Number of Ethernet ports	2
Ethernet port 1	1x10/100 Base-T (shielded RJ45)
Ethernet port 2	1x10/100 Base-T (shielded RJ45)

### Communication CAN

Number of CAN ports	2
CAN port 1	1 Mbit
CAN port 2	1 Mbit

### Expansion interface

SD card	SD and SDHC
USB	2xUSB 2.0 500mA

### Environmental

Operating temperature	-30°C to +70°C
Storage temperature	-40°C to +80°C
Shock	40g, half-sine, 11ms according to IEC60068-2-27
Vibration	4g, according to IEC 60068-2-6, Test Fc
Sealing front	IP66, NEMA 4X/ 12 and UL Type 4X/ 12
Sealing back	IP20
Humidity	5% - 95% non-condensed
Altitude (max)	< 3000m

## Display

Size diagonal	12.1" diagonal
Resolution	1280x800 pixels
Backlight	LED Backlight
Backlight life time	70000 hours
Backlight brightness	1000 cd/m2
Backlight dimming	Marine optimized dimming
Display type	TFT-LCD with LED backlight

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