



#### X2 extreme 12

### 12" Rugged HMI with iX runtime

1280 × 800 pixel (16:10)
TFT-LCD touch screen
1.5 GB application memory
Ethernet 1x100 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

#### **Facts**

### General description

Part number	640014305
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	1million finger touch operations
Touch type	Resistive
Cut-out size	324 x 226mm
Weight	2.8 kg
Housing material	Powder-coated aluminum, Black

#### Power

(max) Input fuse

Input voltage	24 VDC (18 to 32 VDC) CE: The power supply must conformwith 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	16 W

### Serial communication

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

#### Ethernet communication

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

### Communication CAN

Number of CAN ports	1
CAN port 1	1 Mbit

### Expansion interface

SD card	SD and SDHC
USB	2xUSB 2.0 500mA

Internal DC fuse

## System

Hardware platform	X2 extreme
CPU	i.MX6DualLite, Dual Cortex-A9 800MHz 512kBL2cache
RAM	1 GB
FLASH	2GB SSD(eMMC), 1.5GB free for application

# Display

Display	
Size diagonal	12.1" diagonal
Resolution	1280x800 pixels
Backlight	LED Backlight
Backlight life time	70000 hours
Backlight brightness	500 cd/m2
Backlight dimming	Marine optimized dimming
Display type	TFT-LCD with LED backlight

### 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