



X2 extreme 12 HP SC 12" Rugged HMI with iX runtime/CODESYS

1280 × 800 pixel (16:10) TFT-LCD touch screen
High brightness display
CODESYS control integrated
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

Facts

General description

Part number	640016405
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
	Panel Mount
	1million 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 V DC (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 II power supplies.
Power consumption (max)	27 W
Input fuse	Internal DC fuse

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

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

Drivers

Softcontrol

Codesys runtime version	3.5
Codesys EtherCAT	Yes
Codesys Modbus Ethernet	Yes
Codesys Modbus RTU	Yes
CANopen	Yes
Non volatile variables	Yes

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)
	2
	1 Mbit
	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

ABB - COMLI Master (5.7.2)

ABB - COMLI Slave (4.11.0)

Lenze - LECOM A/B (5.6.0)

LS Industrial System - Glofa (5.3.0)

More drivers ▼

⚙️ Smart Engineering Resources

📎 Custom recipe - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/6774/custom-recipe---ix-script-module	📎 Barcode scanner serial - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10086/barc-script-module
📎 MJPEG graphical control - iX application https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/6775/mjpeg-graphical-control---ix-application	📎 X2 base V2 to GL9971 (PIO) sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10254/x2ba
📎 Password expire - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7277/password-expire---ix-script-module	📎 X2 to BFI-P2/H3 by Modbus TCP - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10255/x2-to-tcp---ix-script-module
📎 Barcode scanner USB - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/6777/barcode-scanner-usb---ix-script-module	📎 X2 to BFI by Modbus RTU - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10256/x2-to-script-module
📎 FTP Client - iX sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10374/ftp-client-ix-sample	📎 MQTT Client - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10257/mqtt
📎 Log custom debug messages - iX sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/6781/log-custom-debug-messages---ix-sample	📎 MQTT Client (JSON) - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10227/mqtt
📎 Recipes with pictures - iX sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7068/recipes-with-pictures---ix-sample	📎 Detect Internet connection - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10258/detect-ix-script-module
📎 Customise report - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7070/customize-report---ix-script-module	📎 Detect VNC Client - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10259/detect-module
📎 DatePicker - iX Developer script https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7071/datepicker-ix-developer-script	📎 Detect USB or SD card - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10260/detect-script-module
📎 Execute external SQL queries from file https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7275/execute-external-sql-queries-from-file	📎 X2 to BFI-E3 by Modbus TCP - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10387/x2-to-ix-script-module
📎 Power BI basic process data template https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/9999/power-bi-basic-process-data-template	📎 Login dialog customized - iX script sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10389/login-script-sample
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📎 Vessel Quick View - iX sample https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10250/vessel-quick-view---ix-sample	📎 Serial ReadWrite - iX script module https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10085/serial-readwrite-module