



X2 extreme 7

7" Rugged HMI with iX runtime

800 × 480 pixel (16:9)
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	640013905
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	204 x 143 x 62mm
	Panel Mount
	1 million finger touch operations
Touch type	Resistive
Cut-out size	189 x 128mm
Weight	0.8 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)	10 W
Input fuse	Internal DC fuse

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

Display

Size diagonal	7" diagonal
Resolution	800x480 pixels
Backlight	LED Backlight
Backlight life time	50000 hours
Backlight brightness	500 cd/m2
Backlight dimming	Marine optimized dimming
Display type	TFT-LCD with LED backlight

Drivers

ABB - COMLI Master (5.7.2)
ABB - COMLI Slave (4.11.0)
ABB - TotalFlow (5.2.1)
Allen Bradley - ControlLogix Ethernet IP (4.24.1)
Allen Bradley - DF1 (5.8.0)
Allen Bradley - DH485 (4.6.2)
Allen Bradley - MicroLogix Ethernet (5.6.0)
Allen Bradley - SLC5/PLC5 Ethernet (5.4.0)
Altus - Alnet I (5.8.0)
Animatics - SmartMotor (5.7.1)

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

Lenze - LECOM A/B (5.6.0)
LS Industrial System - Glofa (5.3.0)
LS Industrial System - Master K (5.4.0)
Matsushita - MEWTOCOL-COM (5.9.2)
Mitsubishi Electric - Alpha2 (5.7.0)
Mitsubishi Electric - A-series (C24) (5.6.0)
Mitsubishi Electric - A-series (CPU) (5.10.0)
Mitsubishi Electric - A-series (E71) (5.4.0)
Mitsubishi Electric - Freqrol FR-A PLC (5.8.2)
Mitsubishi Electric - FX Series ΔDP/RD (5.10.0)

More drivers ▼

Smart Engineering Resources

- [X2 to BFI-E3 by Modbus TCP - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7070/customise-report---ix-script-module?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7070/customise-report---ix-script-module?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Genset sample - iX template \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7071/datepicker---ix-developer-script?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7071/datepicker---ix-developer-script?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Login dialog customized - iX script sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7072/recipes-with-pictures---ix-sample?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7072/recipes-with-pictures---ix-sample?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Quadratic terms calculator - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7073/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7073/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [iX CyberSecurity Extension \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7074/mjpeg-graphical-control---ix-application?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7074/mjpeg-graphical-control---ix-application?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [X2 base V2 to GI 9971 \(PIQ\) sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7075/ftp-client---ix-sample?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7075/ftp-client---ix-sample?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [X2 to BFI-P2/H3 by Modbus TCP - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7076/excel-basic-process-data-template?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7076/excel-basic-process-data-template?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [X2 to BFI by Modbus RTU - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7077/setting-up-projects-for-energy-meter?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7077/setting-up-projects-for-energy-meter?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [MQTT Client \(JSON\) - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7078/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7078/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [MQTT Client - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7079/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7079/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Detect internet connection - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7080/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7080/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Detect VNC Client - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7081/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7081/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Detect USB or SD card - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7082/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7082/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Serial ReadWrite - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7083/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7083/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Barcode scanner serial - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7084/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7084/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Vessel Quick View - iX sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7085/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7085/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Power BI basic process data template \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7086/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7086/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Barcode scanner USB - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7087/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7087/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [FTP Client - iX sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7088/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7088/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Log custom debug messages - iX sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7089/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7089/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Recipes with pictures - iX sample \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7090/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7090/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Execute external SQL queries from file \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7091/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7091/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Excel basic process data template \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7092/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7092/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Scheduler online editor - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7093/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7093/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [OEE calculation example \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7094/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7094/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Custom recipe - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7095/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7095/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [MJPEG graphical control - iX application \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7096/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7096/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Password expire - iX script module \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7097/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7097/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [Setting up projects for Energy Meter \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7098/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7098/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)
- [iX File browser \(https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7099/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666\)](https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7099/execute-external-sql-queries-from-file?hstc=133514769.4931d322ad38576815e60802e8ae6d22.1682440547395.1683236169949.1686247146652.6&hssc=133514769.32.1686247146652&hsfp=2393331666)

