



X2 extreme 12 SL HP SC

12" Rugged sealed HMI with iX runtime/CODESYS

1280 × 800 pixel (16:10) TFT-LCD touch screen
 High brightness display
 CODESYS control integrated
 M12 connectors - IP66
 -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	640016605
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	341 x 243 x 65mm
	VESA 100 x 100
	1million finger touch operations
Touch type	Resistive
Cut-out size	N/A
Weight	3.4 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 8pin M12
Serial port 1	RS 232
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 (4 pin M12)
Ethernet port 2	1x10/100 Base-T (4 pin M12)
	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 IEC 60068-2-27
Vibration	4g, according to IEC 60068-2-6, Test Fc
Sealing front	IP66 (IP65 for ATEX/IECEX)
Sealing back	IP66 (IP65 for ATEX/IECEX)
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/barcode-scanner-serial-ix-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/x2base-v2-to-gl9971-pio-sample)
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-bfi-p2-h3-by-modbus-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-bfi-by-modbus-rtu-ix-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-client-ix-script-module)
Log custom debug messages - iX sample (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/6781/log-custom-debug-messages---ix-sample)	MQTT Client (ISON) - iX script module (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10227/mqtt-client-ison-ix-script-module)
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-internet-connection-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-vnc-client-ix-script-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-usb-or-sd-card-ix-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-bfi-e3-by-modbus-tcp-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-dialog-customized-ix-script-sample)
Excel basic process data template (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/7269/excel-basic-process-data-template)	Genset sample - iX template (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10671/genset-sample-ix-template)
Scheduler online editor - iX script module (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10003/scheduler-online-editor---ix-script-module)	X2 Clock sync from PLC - iX script module (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10391/x2-clock-sync-from-plc-ix-script-module)
OEE calculation example (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10007/oe-calculation-example)	Quadratic terms calculator - iX script module (https://smartstore.beijerelectronics.com/en/Smart_Engineering_Resources/10723/quadratic-terms-calculator-ix-script-module)
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-ix-script-module)