

## X2 extreme 15 HP SC

15' Rugged HMI with iX runtime/CODESYS
$1280 \times 800$ pixel (16:10) TFT-LCD touch screen High brightness display CODESYS control integrated Ethernet $2 \times 100 \mathrm{Mbit}$ $-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ operating temperature DNV, KR, GL, LR, ABS, CCS, BV marine approvals UL Class I Div 2, ATEX/IECEx Zone 2,22

| E Facts |  |
| :--- | ---: |
| General description |  |
| Part number | 640016805 |
| Part status | Active |
| Warranty | 2 year |

## Certifications

| General CE, FCC, KCC, UL 61010-2-201 |  |
| :--- | ---: |
| Hazardous | ULC1D2, ATEX (Zone2), ATEX (Zone22), IEXEx |
| (Zone2), IEXEx (Zone22) |  |
| Marine | DNV, KR, GL, LR, ABS, CCS, BV |

Mechanical

| Mechanical size | $410 \times 286 \times 73 \mathrm{~mm}$ |
| :--- | ---: |
| Mounting option | Panel Mount |
| Number of touches | 1million finger touch operations |
| Touch type | Resistive |
| Cut-out size | $394 \times 270 \mathrm{~mm}$ |
| Weight | 4.1 kg |
| Housing material | Powder-coated aluminum, Black |


| Power |  |
| :--- | ---: |
| Input voltage$24 \mathrm{VDC}(18$ to 32 VDC$) \mathrm{CE}$ : The power supply <br> must conformwith the requirements according to <br> IEC 60950 and IEC 61558-2-4.UL and cUL: The <br> power supplymust conformwith the requirements <br> for class II power supplies. |  |
| Power <br> consumption <br> (max) |  |
| Input fuse |  |

## System

| CPU | i.MX6Quad, Quad ARMCortex-A9 1.0 GHz 1MBL2cache |
| ---: | ---: |
| RAM | 2 GB |

## Softcontrol

| Codesys runtime version | 3.5 |
| :--- | :---: |
| Codesys EtherCAT | Yes |
| Codesys Modbus Ethernet | Yes |
| Codesys Modbus RTU | Yes |
| Non volatile variables | Yes |

## Communication serial

| Number of serial ports | 2 Port 9pin DSUB |
| :--- | ---: |
| Serial port 1 | RS $232($ RTS /CTS) |
| Serial port 2 | RS422 (RTS)/RS485 |
| Serial port 3 | RS 485 |

Ethernet communication

| Number of ethernet ports | 2 |
| :--- | ---: |
| Ethernet port 1 | $1 \times 10 / 100$ Base-T (shielded RJ45) |
| Ethernet port 2 | $1 \times 10 / 100$ Base-T (shielded RJ45) |

Expansion interface

| SD card | SD and SDHC |
| :--- | ---: |
| USB | $2 \times U S B 2.0500 \mathrm{~mA}$ |

Environmental

| Operating <br> temperature | $-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| :--- | ---: | ---: |
| Storage <br> temperature | $-40^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Shock | 40 g, half-sine, 11 ms according to |
| IEC $60068-2-27$ |  |

Display


| Size diagonal | $15.4^{\prime \prime}$ diagonal |
| :--- | ---: |
| Resolution | $1280 \times 800$ pixels |
| Backlight | LED Backlight |
| Backlight life time | 100000 hours |
| Backlight | $1000 \mathrm{~cd} / \mathrm{m} 2$ |
| brightness |  |
| Backlight dimming | Marine optimized dimming, down to 0,5 |
| cd/m2 |  |
| 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 (5.2.1)
Beckhoff - ADS (5.12.1)
Beckhoff - ADS Symbolic (4.7.0)
Beijer Electronics - iX Demo (4.4.0)
Bernecker + Rainer - Mininet (5.6.0)
BoschRexroth - IndraDrive C (5.2.1)
CODESYS - ARTI v2.x, v3.x (4.8.0)
CODESYS - SoftControl Direct Access (4.4.0)
Cognex - InSight (5.2.2)
Control Techniques - Unidrive (5.3.1)
CTC - Serial Binary (5.4.2)
Delta - PLC Modbus ASCII (5.6.0)
Emerson - Modbus Master RTU/ASCII (5.4.0)
Eurotherm - Easy Serial 631 (5.1.1)
Fatek - Facon (5.10.0)
Galil - DMC (5.2.2)
GE Fanuc - Ethernet SRTP (5.5.0)
GE Fanuc - SNPX (5.6.1)
Gidding \& Lewis - Motion control (5.4.0)
IAI - Xsel (5.4.1)
Idec - Computer Link (5.8.0)
Johnson Control - JCONTROL (5.2.1)
KEB - COMBIVERT (5.4.0)
Keyence - KV-series (5.6.0)
Koyo - DirectNET (5.5.0)
Koyo - K Sequence (5.3.1)

| 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 ADP/BD (5.10.0) |
| Mitsubishi Electric - FX Series ENET (5.4.1) |
| Mitsubishi Electric - FX Series Serial (5.16.0) |
| Mitsubishi Electric - MC Protocol (5.11.4) |
| Mitsubishi Electric - MR-J2/MR-J3-T MELSERVO (5.9.0) |
| Mitsubishi Electric - QnA/Qnn Serial (5.10.0) |
| Mitsubishi Electric - QnA/Qnn (C24) (5.5.0) |
| Mitsubishi Electric - Q-Series Ethernet (E71) (5.5.0) |
| Modicon - Modbus Master (5.19.4) |
| Modicon - Modbus Slave RTU/TCP (4.20.2) |
| NEMA0183 - NEMA 0183 (4.6.0) |
| Omron - Ethernet IP (4.3.3) |
| Omron - FINS (5.9.5) |
| Omron - Host Link (5.6.0) |
| Regin - EXOline (5.3.2) |
| SAIA - S-BUS Serial/Ethernet (5.7.0) |
| Schneider Electric - Modbus (5.3.0) |
| Schneider Electric - TSX Uni-Telway (4.5.3) |
| Siemens - S7 200 PPI (5.8.5) |
| Siemens - S7 over TCP (S7-200/300/400/1200/1500) (4.18.0) |
| Siemens - MPI (HMI Adapter) (5.7.0) |
| WAGO - Modbus TCP (5.10.0) |
| Vigor - M/VB-Series (5.6.0) |
| Yamaha - VIP (5.2.1) |
| Yaskawa - Memobus Master (5.7.0) |
| Yokogawa - FA-M3 (5.6.0) |

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