



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, KR, GL, LR, ABS, CCS, BV marine approvals
 UL Class I Div 2, ATEX/IECEX Zone 2,22

Facts

General description

Part number	640016405
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	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

Input voltage	24 V DC (18 to 32 VDC) <small>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.</small>
Power consumption (max)	27 W
Input fuse	Internal DC fuse

System

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

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	1
Ethernet port 1	1x10/100 Base-T (shielded RJ45)
Ethernet port 2	1x10/100 Base-T (shielded RJ45)

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

Size diagonal	12.1" diagonal
Resolution	1280x800 pixels
Backlight	LED Backlight
Backlight life time	100000 hours
Backlight brightness	1000 cd/m2
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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