X2 marine
Built for life at sea

X2 marine offers user-friendly, reliable operation offshore, on ships and in other maritime applications. With black frame and nautical society certifications, X2 marine panels are suitable for mounting on the bridge, in the engine room and inside cabins. X2 marine panels are available with optional high brightness display and integrated CODESYS PLC functionality.

X2 marine panels are available in 7 and 15 inches with optional high brightness display and integrated CODESYS PLC functionality.

ClassNK EN60945 DNV ABS KR KOREAN REGISTER CCS UL CE FC K

Wide screen format
X2 panels offer wide screen format, designed to succeed the traditional 4:3 square aspect ratio.

Powerful ARM Cortex-A9 processor
Powerful single, dual or quad core ARM Cortex-A9 processor delivers fast screen changes and program execution in demanding applications.

Dimmable backlight
Comfortable and safe operation in high and low ambient light. Backlight is continuously dimmable to less than one cd/m².

UL, CE, FCC and KCC certificates
The entire X2 range offers a strong standard certification with UL, CE, FCC and KCC certificates.

Robust aluminum housing
Robust aluminum housing with IP65, NEMA 4X/12 and UL Type 4X/12 front. Resistant to direct rain, snow or wash-downs, dirt, grime and dust.

High brightness display
Optional 1,000 cd/m² backlight provides excellent readability in high ambient light levels such as sunlight.

iX software – why you'll love our hardware
The iX software gives you smart communication tools. iX combines top-class vector graphics and easy-to-use functions that provide reliable operation, and almost limitless connectivity to your other equipment.

Wide operating temperature -10°C to +60°C
The wide -10° to +60°C operating temperature range satisfies the demands of most industries.

Add control by CODESYS
Choose optional IEC 61131-3 PLC functionality by CODESYS, running on dedicated CPU cores for safe and fast program execution. Just add remote I/Os for a scalable, cost-effective solution.

Fast forward engineering with WARP
Create integrated HMI, control, drives and data communication solutions with WARP Engineering Studio. WARP automatically configures all hardware, software and communication in your application.

Marine certifications
The X2 panels meet extended classes of marine certifications not normally carried by HMIs, making them suitable for all onboard locations.

Built-in digital outputs
X2 marine panels with high brightness option have built-in digital outputs for direct connection of alarms, signal lights, etc.

Custom design or non-branded
Profile your brand or go for neutral. X2 panels offer custom designed or non-branded front foils, as alternatives to the standard Beijer Electronics branded versions.

CiX CAN, Profibus and MPI module
It's easy to interface with controllers using optional CiX CAN, Profibus or MPI modules.

Internal isolation
Internal isolation conforms to marine standards for both burst and surge immunity.

SD memory card
Card holder and USB connection are located behind the lid on the back of the panel for smart memory expansion, project backup and application loading.
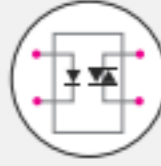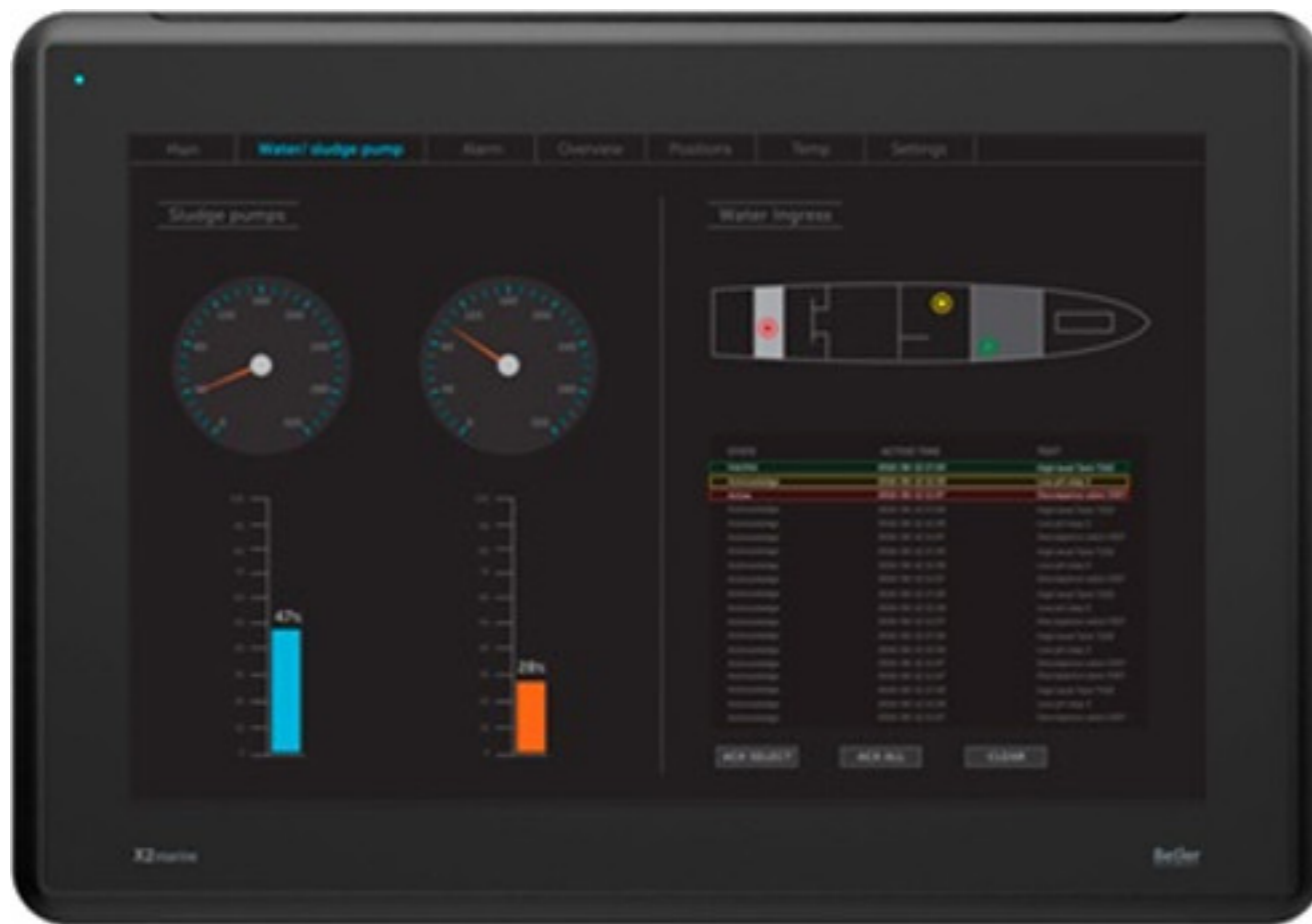
	X2 marine 7 (HB, SC, HB SC)	X2 marine 15 (HB, SC, HB SC)
General description		
Part number	630002505 (HB: 630008705, SC: 630008605, HB SC: 630008805)	640003305 (HB: 640003505, SC: 640009005, HB SC: 640009405)
Warranty	2 year	
Certifications*		
General	CE, FCC, KCC	
Marine	BV, DNV, KR, GL, LR, ABS, CCS, EN60945, NK	
UL	UL 61010-2-201	
Mechanical		
Mechanical size	204 × 143 × 50mm	410 × 286 × 61mm
Touch type	Resistive	
Cut-out size	189 × 128mm	394 × 270mm
Weight	0.8 kg	3.85 kg
Housing material	Powder-coated aluminum, Black	
Power		
Input voltage	24 V DC (18 to 32 VDC)	
Power consumption, max	14.4W (HB: 21.6W, SC: 14.4W, HB, SC: 21.6W)	31.2W (HB: 33.6W, SC: 31.2W, HB SC: 33.6W)
Input fuse	Internal DC fuse	
System		
CPU	i.MX6Solo Single Cortex-A9 1.0GHz 512kBL2cache (HB, HB SC: Quad ARMCortex-A9, SC: Dual Cortex-A9)	i.MX6Quad, Quad ARMCortex-A9 1.0GHz 1MBL2cache
RAM	512 MB (HB, HB SC: 2 GB, SC: 1 GB)	2 GB
FLASH	2GB SSD(eMMC), 1.5GB free for application storage	
Display		
Size diagonal	7" diagonal	15.4" diagonal
Resolution	800 × 480 pixels	1280 × 800 pixels
Backlight	LED Backlight	
Backlight life time	50 000 hours	50 000 hours (HB, HB SC: 30 000 hours)
Backlight brightness	500 cd/m² (HB, HB SC: 1 000 cd/m²)	450 cd/m² (HB, HB SC: 1 000 cd/m²)
Backlight dimming	Marine optimized dimming, down to 0,5 cd/m²	
Display type	TFT-LCD with LED backlight	
Softcontrol		
CODESYS runtime version	NA (HB: NA, SC: 3.5, HB SC: 3.5)	
CODESYS EtherCAT	NA (HB: NA, SC: Yes, HB SC: Yes)	
CODESYS Modbus Ethernet	NA (HB: NA, SC: Yes, HB SC: Yes)	
CODESYS Modbus RTU	NA (HB: NA, SC: Yes, HB SC: Yes)	
Non volatile variables	NA (HB: NA, SC: 32KB, HB SC: 64KB)	NA (HB: NA, SC: 64KB, HB SC: 64KB)
Digital IO		
Digital output	NA (HB, HB SC: 2×DO Solid state relay, 0.5A@24VDC)	
Communication serial		
Number of serial ports	1 Port 9pin DSUB	
Serial port 1	RS 232 (RTS/CTS)	
Serial port 2	RS422/485	
Serial port 3	RS485 (only if COM 2 is RS485)	
Ethernet communication		
Number of ethernet ports	1 (HB, SC, HB SC: 2)	2
Ethernet port 1	1× 10/100 Base-T (shielded RJ45)	
Ethernet port 2	NA (HB/SC/HB SC: 1×10/100 Base-T - shielded RJ45)	1× 10/100 Base-T (shielded RJ45)
Expansion interface		
Expansion port	Yes, ciX expansion module	
SD card	SD and SDHC	
USB	1× USB 2.0 500mA (HB/HB SC: 2×USB 2.0 500mA)	2× USB 2.0 500mA
Environmental		
Operating temperature	-10°C to +60°C	
Storage temperature	-20°C to +70°C	
Shock	15g, half-sine, 11ms according to IEC60068-2-27	
Vibration	1g, according to IEC 60068-2-6, Test Fc	
Sealing front	IP65, NEMA 4X/12 and UL Type 4X/12	
Sealing back	IP20	
Humidity	5% – 85% non-condensed	

*Certifications pending. Please refer to www.beijerelectronics.com/x2 for detailed status.