

X2 base

New versions of cost-effective, full functionality HMI panels

The X2 base family is now updated with the new range of X2 base v2 HMIs offering improved performance, more display sizes and an additional range of high-performance HMIs. The X2 base v2 panels are cost-effective industrial HMIs with high-resolution touch-screens and modern design. The HMIs combine IP65 corrosion resistant plastic housing with the full version of the iX software, providing a cost-effective yet advanced HMI solution for small to medium applications.

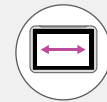
X2 base v2 HMIs are available in 5, 7 and 10 inches and in 7, 10 and 15 inches high-performance versions.

The high-performance versions are scheduled for launch in 2021.



See page 20 for technical data.

Features X2 base



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



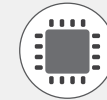
UL, CE, FCC and KCC certificates
The entire X2 range offers a strong standard certification with UL, CE, FCC and KCC certificates.



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.



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.



Power efficient ARM9 processors
Power efficient ARM9 processor provides strong performance for small and medium sized applications.



Corrosion resistant plastic housing
Corrosion resistant plastic housing with IP65, NEMA 4X/12 and UL Type 4X/12 front.



Operating temperature -10°C to +50°C
The -10°C to +50°C operating temperature range satisfies the demands of most industries.

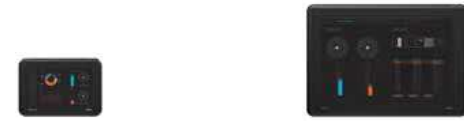


All the communication ports you need
X2 base offers 1 × Ethernet, 4 × serial, 1 × USB as standard, securing ample communication with other equipment.



	X2 base 5 v2*	X2 base 7 v2 (HP)*	X2 base 10 v2 (HP)*	X2 base 15 v2 (HP)*
General description				
Part number	630005110	630005210 (630009510)	630005310 (630009610)	630009810
Warranty	2 year			
Certifications				
General	CE, FCC, KCC, UL 61010-2-201			
Mechanical				
Mechanical size	173 x 109 x 37mm	202 x 152 x 37mm	290 x 193 x 40mm	409 x 270 x 43mm
Mounting option	Panel Mount			
Number of touches	1million finger touch operations			
Touch type	Resistive			
Cut-out size	161 x 93mm	186 x 136mm	275 x 177mm	393 x 254mm
Weight	0.32 kg	0.58 kg	0.86 kg	2.46 kg
Housing material	Plastic (PC+ABS), Gray			
Power				
Input voltage	24 V DC (18 to 32 VDC)			
Power consumption, max	4.8 W	5.7 W (6.6 W)	6.8 W (7.7 W)	17.3 W
Input fuse	Internal DC fuse			
System				
CPU	ARM Cortex A8 600MHz	ARM Cortex A8 600MHz (ARM Cortex A8 1000MHz)		ARM Cortex A8 1000MHz
RAM	512 MB			
FLASH	2 GB, 1.5 GB free	2 GB, 1.5 GB free		2 GB, 1.5 GB free
Software				
Operating system	Windows Embedded CE 8.0			
Display				
Size diagonal	5.0" diagonal	7.0" diagonal	10.1" diagonal	15.6" diagonal
Resolution	800 x 480 pixel (5:3)		1024 x 600 pixel (17:10)	1366 x 768 pixel (16:19)
Backlight	LED Backlight			
Backlight life time	20 000 hours		30000 hours	50000 hours
Backlight brightness	250 cd/m²	400 cd/m²	350 cd/m²	300 cd/m²
Backlight dimming	Industrial Dimming			
Display type	TFT-LCD with LED backlight			
IOs				
Digital output	No			
Communication serial				
Number of serial ports	1port9pinDsub, 1port3pinScrew (HP: 2port9pinDsub, 1port3pinScrew)			
Serial port 1	RS 232 (RTS/CTS)			
Serial port 2	RS422/485			
Serial port 3	RS 485			
Serial port 4	HP only: RS 232 (RTS/CTS)			
Serial port 5	HP only: RS422/485			
Serial port 6	RS485			
Ethernet communication				
Number of ethernet ports	1	1 (HP:2)		2
Ethernet port 1	1x10/100 Base-T (shielded RJ45)			
Ethernet port 2	NA	NA (1x10/100 Base-T (shielded RJ45))		
Expansion interface				
Expansion port	No			
SD card	No	No (Yes)		Yes
USB	1 (HP: 2)			
Environmental				
Operating temperature	-10°C to +50°C			
Storage temperature	-20°C to +60°C			
Shock	15g, half-sine, 11ms according to IEC60068-2-27			
Vibration	1g, according to IEC 60068-2-6, Test Fc			
Sealing front	IP65			
Sealing back	IP20			
Humidity	5% – 85% non-condensed			

*Preliminary data. The high-performance versions are scheduled for launch in 2021.



	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 GL, KR, LR, ABS, CCS, EN60945, NK	
UL	UL 61010-2-201	
Mechanical		
Mechanical size	204 x 143 x 50mm	410 x 286 x 61mm
Touch type	Resistive	
Cut-out size	189 x 128mm	394 x 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 ARM Cortex-A9, SC: Dual Cortex-A9)	i.MX6DualLite, Dual Cortex-A9 1.0GHz 512kBL2cache (i.MX6Quad, Quad ARM Cortex-A9 1.0GHz 1MBL2cache)
RAM	512 MB (HB, HB SC: 2 GB, SC: 1 GB)	1 GB (2 GB)
FLASH	2GB SSD(eMMC), 1.5GB free for application storage	
Display		
Size diagonal	7" diagonal	15.4" diagonal
Resolution	800 x 480 pixels	1280 x 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	Marine optimized dimming
Display type	TFT-LCD with LED backlight	
Softcontrol		
CODESYS runtime version	NA (HB: NA, SC: 3.5, HB SC: 3.5)	NA (HB: NA, SC: 3.5, HB SC: 3.5)
CODESYS EtherCAT	NA (HB: NA, SC: Yes, HB SC: Yes)	NA (HB: NA, SC: Yes, HB SC: Yes)
CODESYS Modbus Ethernet	NA (HB: NA, SC: Yes, HB SC: Yes)	NA (HB: NA, SC: Yes, HB SC: Yes)
CODESYS Modbus RTU	NA (HB: NA, SC: Yes, HB SC: Yes)	NA (HB: NA, SC: Yes, HB SC: Yes)
CANopen	NA (HB: NA, SC: Yes, HB SC: Yes)	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: 2xDO 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 x 10/100 Base-T (shielded RJ45)	
Ethernet port 2	NA (HB/SC/HB SC: 1x10/100 Base-T - shielded RJ45)	
Expansion interface		
Expansion port	Yes, cIX expansion module	
SD card	SD and SDHC	
USB	1xUSB 2.0 500mA (HB/HB SC: 2xUSB 2.0 500mA)	2 x 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	