iX HMI Rugged

Proven to the extremes

Beijer
ELECTRONICS

Ruggedly reliable

When the going gets tough, it just keeps going

Operating in extreme environments is tough stuff. So we designed the rugged iX HMI operator panels to give you a long and productive service life, no matter how rough it gets.

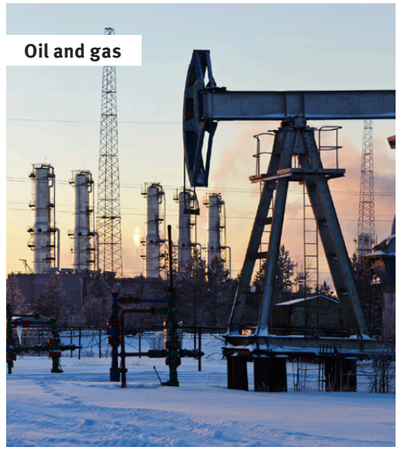
Flexible software and rock solid hardware always function smoothly. Whether they're hit by wind, snow and rain, working on heavy duty motors in remote locations, or in a steamy offshore engine room. Things might get hot, but you'll never have to sweat on your hardware letting you down.

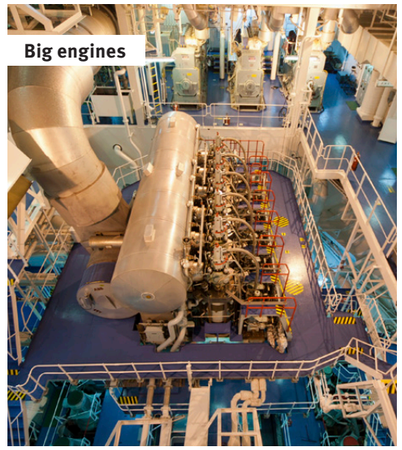
With iX HMI Rugged you get:

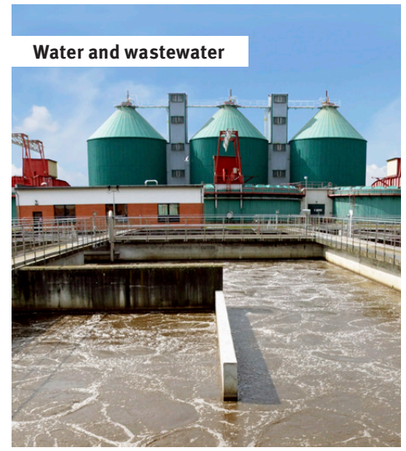
- Proven reliability, we test our hardware to the extremes
- Trouble-free use in the harshest of environments, fully certified
- An all-in-one solution including hardware and software

World of rugged

Rugged iX HMI panels are designed and tested to perform in environments with high levels of shock, vibration, humidity and extreme temperatures. And they're certified by all major institutions, so you can use our panels with confidence, anywhere in the world.







Rugged to the core

We don’t compromise because you don’t

We put rugged into even the smallest details in our HMI. Then we test it. And test it again. So however tough your requirements are, you can be sure the HMI can handle them.

This truly robust HMI doesn’t compromise. The panels are certified by all major classification societies, designed to perform in applications exposed to arctic cold or tropical heat, to water splashes, waves or constant vibrations.

Hazardous environments everywhere

Certified for use in hazardous areas, the rugged iX HMI panels can operate in any environment, even in zones where hazardous gases and vapors are present.

UL Class I Div 2 – US hazardous location certification
ATEX Zone2 – European hazardous location certification
IECEx Zone2 – International hazardous location certification

Rugged marine environments

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

DNV – Det Norske Veritas
ABS – American Bureau of Shipping
GL – Germanischer Lloyd
LR – Lloyd’s Register UK
KR – Korean Register of Shipping
EN60945 – for use on the bridge of a ship

We do our best to break every part

So you know they won’t break down in the field

We perform extensive testing to ensure that the rugged iX HMI operator panels meet high environmental standards and to guarantee reliable operation in challenging environments.

Read about our test procedures and certifications here.
www.beijerelectronics.com/rugged

“With over thirty years of experience designing and manufacturing rugged HMI, we offer you the confidence to perform in the field.

iX T15BR

iX T7BR

Built to withstand the elements

High brightness display * 1,000 cd/m² backlight with anti-reflective film provides excellent readability in high ambient light level such as sunlight.

Wide temperature range -30 to +70°C operating and -40 to +85°C storage.

IP66 and NEMA4X sealing resistant to direct snow and rain or high pressure wash-downs, dirt, grime and dust.

High vibration test to 4 g RMS sweep sine for vibration and 40 g 11 ms half sine for shock.

Dimmable backlight for high and low ambient light conditions. Backlight is continuously dimmable to less than 1 cd/m².

High reliability resistive touchscreen including chemically strengthened glass for longer life.

Isolation conforms to marine standards for both burst and surge immunity.

SLC NAND Flash memory technology provides operation at extended temperatures and longer part life through additional write cycles.

Extended power range permits 12 V or 24 V DC power supply allowing operation without a DC to DC converter.

CiX CAN module* easily interfaces with controllers using CAN as communication channel.

** Available as option*

Smart software

Another reason to love our hardware

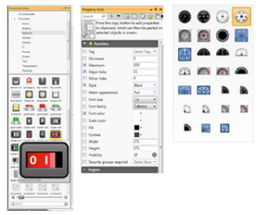
The iX HMI Software gives you smart tools to communicate efficiently. It combines top-class vector graphics and easy-to-use functions that provide intuitive and reliable operation on the spot. And it gives you almost limitless connectivity to your other equipment.

Complete HMI functionality

Find all essential functions included in the software such as data logging, recipes, alarms, trends and audit trail. You can easily insert ready-made objects with built-in functionality and vector graphics into the screen. A low entry level makes it easy to get an application up and running.

For advanced users

iX provides options to design specialized functionality. Use C# scripting or .NET components. Take advantage of third party objects and import .NET assemblies to extend the functionality. Control and exchange data with multiple controllers and enjoy connectivity via SQL, FTP, OPC and web.



Efficient workflow

The intuitive development environment speeds up engineering. Pre-styled objects, a customizable workspace, component library with vector graphics, and smart property grid boost your efficiency and workflow. Easily share your customized objects and advanced script modules with colleagues.

Connect to all automation brands

An extensive driver list enables communication with other automation equipment from all major manufacturers. Share information easily between users and have safe control of complex systems, even over long distances. Transfer files and control panels remotely with FTP and VNC servers.

	iX T7BR	iX T15BR
Display		
Type	800 × 480, TFT color LCD	1280 × 800, TFT color LCD
Size	7”	15.4”
Backlight	White LED	White LED
Brightness	500 cd/m² or 1,000 cd/m²	450 cd/m² or 1,000 cd/m²
Dimming	Maritime optimized to less than 1 cd/m²	Maritime optimized to less than 1 cd/m²
Touch screen		
Type	Analog-resistive (matte)	Analog-resistive (matte or gloss)
Interfaces		
Ethernet	1 × 10/100Base-T, 1 ×10/100/1000Base-T	1 × 10/100Base-T, 1 ×10/100/1000Base-T
Serial	1 × RS232, 1 × RS422/485 (isolated)	1 × RS232, 1 × RS422/485 (isolated)
USB	3 × USB 2.0 high speed	3 × USB 2.0 high speed
Audio	Headphone or speaker connector	Headphone or speaker connector
Communication modules	CiX CAN module (optional): 2 × galvanically isolated ports	CiX CAN module (optional): 2 × galvanically isolated ports
Processor		
Type	Intel® Atom (1.0 GHz)	Intel® Atom (1.0 or 1.6 GHz)
Memory		
RAM	1 GB DDR2	1 GB DDR2
Flash	4 GB SLC NAND	4 GB SLC NAND
External storage media	One SD card slot	One SD card slot
Realtime clock		
Standard	Battery-backed	Battery-backed
Power		
Input voltage	12 or 24 VDC (10-32 VDC)	12 or 24 VDC (10-32 VDC)
Consumption	15.8 W typical @ 24 VDC	28 W typical @ 24 VDC
Mechanical		
Type	Panel-mount	Panel-mount
Size W×H×D	204 × 143 × 73 mm	410 × 286 × 83 mm
Cut-out dimensions W×H	188 × 127 mm	394 × 270 mm
Mass	1.4 kg	4.5 kg
Housing material	Powder-coated aluminum	Powder-coated aluminum
Environmental		
Ingress protection	IP66 , NEMA 4X front panel	IP66 , NEMA 4X front panel
Temperature	Operating: -30° to 70°C; storage: -40 to 85°C	Operating: -30° to 70°C; storage: -40° to 85°C
Vibration/shock	4 g RMS / 40 g 11 ms half sine	4 g RMS / 40 g 11 ms half sine
Certifications		
UL	UL/cUL 61010 (UL508 replacement) UL50E Type 4X Outdoor	UL/cUL 61010 (UL508 replacement) UL50E Type 4X Outdoor
Marine	DNV, GL, ABS, LR, KR	DNV, GL, ABS, LR, KR
Hazardous	UI/cUL 12.12.01 (UL1604 replacement) Class I Div 2, ATEX (Zone 2), IECEx (Zone2)	UI/cUL 12.12.01 (UL1604 replacement) Class I Div 2, ATEX (Zone 2), IECEx (Zone2)
CE	EN61000-6-4, EN61000-6-2	EN61000-6-4, EN61000-6-2
Software		
Development environments	iX Developer	iX Developer
Runtime environments	iX HMI Software	iX HMI Software

About Beijer Electronics

Beijer Electronics is a fast growing technology company with extensive experience of industrial automation and data communication. The company develops and markets competitive products and solutions that focus on the user. Since its start-up in 1981, Beijer Electronics has evolved into a multinational group present in 19 countries and sales of 1,402 MSEK 2014. The company is listed on the NASDAQ OMX Nordic Stockholm Small Cap list under the ticker BELE.

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