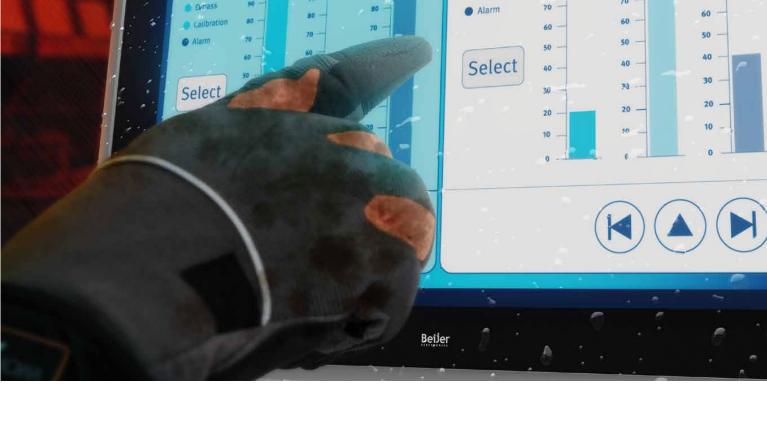
## **iX HMI Rugged** Proven to the extremes

Status

Temp

Line 1



Alarms

RPM

Flow



Datalogs

100

90

80

70

RPM

100

90

26

70

FLOW

Trends

Temp

100

90

80

Line 2

Oypass

Calibration

## **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:

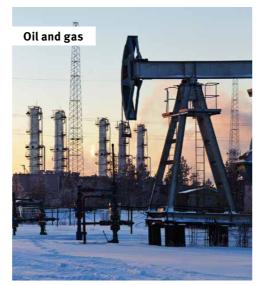
- Proven reliability, we test our hardware to the extremes
- Trouble-free use in the harshest of environments, fully certified
- An all-in-one solution including hardware and software

### 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.









2775

Silo 1

Rugged marine

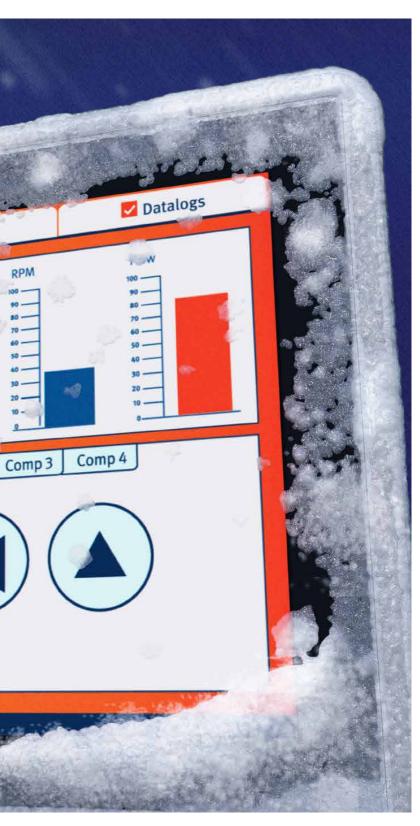
~ irends

Comp 2

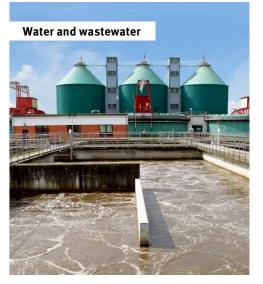
Temp

Comp 1









## **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.



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

### **iX T15BR**





### Built to withstand the elements



High brightness display \* 1,000 cd/m<sup>2</sup> backlight with anti-reflective film provides excellent readability in high ambient light level such as sunlight.



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



Dimmable backlight for high and low ambient light conditions. Backlight is continuously dimmable to less than 1 cd/m<sup>2</sup>.



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

10V-32V

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

\* Available as option



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 Ex nA IIC Gc, IEC 60079-0 and IEC 60079-15 - 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



### iX T7BR





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



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



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



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



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

# **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.



### 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.



### 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.

Beijer CRN 🚇 Allen-Bradley	Schneider Gelectric		
	SIEMENS	88	
Modbus	Ether CAT.		

### 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			
Туре	800 × 480, TFT color LCD	1280 × 800, TFT color LCD	
Size	7"	15.4"	
Backlight	White LED	White LED	
Brightness	500 cd/m <sup>2</sup> or 1,000 cd/m <sup>2</sup>	450 cd/m <sup>2</sup> or 1,000 cd/m <sup>2</sup>	
Dimming	Maritime optimized to less than 1 cd/m <sup>2</sup>	Maritime optimized to less than 1 cd/m <sup>2</sup>	
Touch screen			
Туре	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):	CiX CAN module (optional):	
	2 × galvanically isolated ports	2 × galvanically isolated ports	
Processor			
Туре	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			
Туре	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 Ex nA IIC Gc, IEC 60079-0 and IEC 60079-15	Ul/cUL 12.12.01 (UL1604 replacement) Class I Div 2, ATEX (Zone 2), IECEX Ex nA IIC Gc, IEC 60079-0 and IEC 60079-15	
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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