Revolutionary outside
Evolutionary inside

Transforming premium HMI and advanced soft control into one smart unit

BeiJer
E L E C T R O N I C S

Revolutionary outside

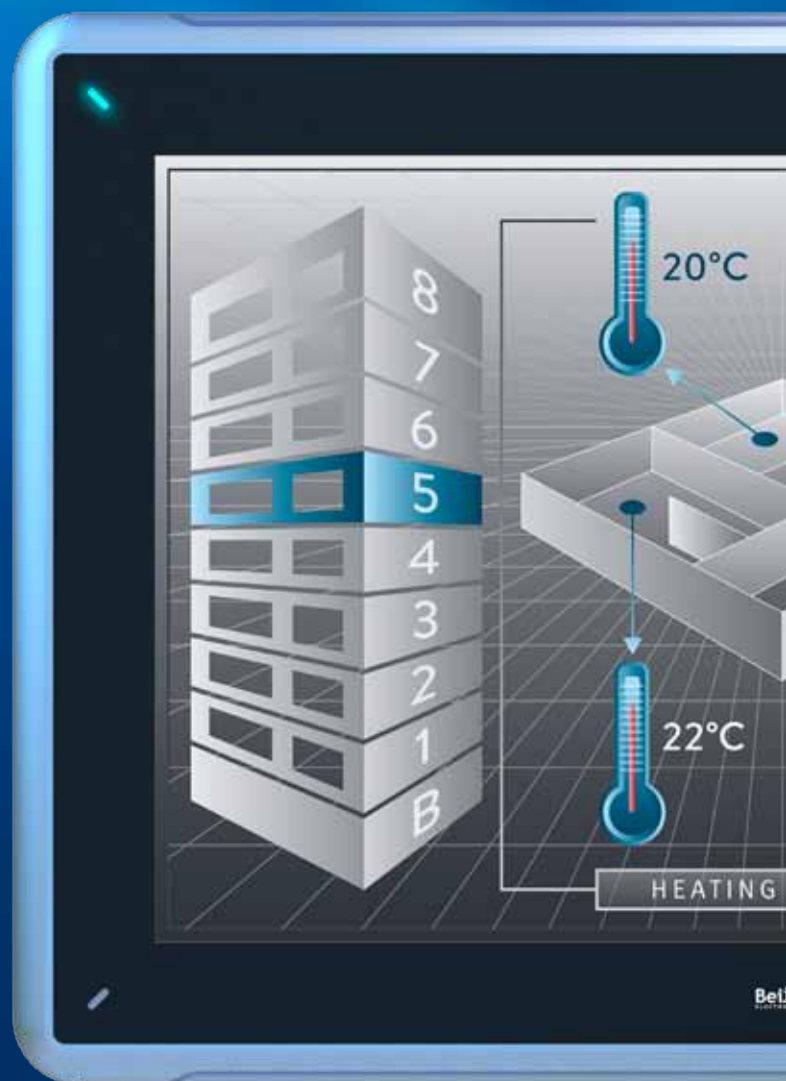## Innovative HMI at the competitive edge of your fingertips

HMI hardware of sophisticated design plus innovative iX software makes the iX HMI solution what it is. Loaded with cutting-edge CODESYS soft control, it delivers a true revolution in system design right into your hands.

New technology for a new perspective
A smart and intuitive HMI opens the gateway to improved system design and gives you the competitive edge. Adapting the look of any machine or system to fit the user, attractive iX HMI with top-class graphics boosts your company brand and improves the face you show the world.

Flexibility for system designers and end-users alike
The iX HMI solution simplifies operation while making it more stylish, something that benefits both you and your customer. The market has evolved and so have the types of end-users. Likewise, applications need to evolve to suit new user expectations. The slim, flexible and easy-to-use iX HMI SoftControl delivers streamlined handling, improving user workflows while eliminating dependence on user-manuals.

> **" An efficient HMI makes business sense. It earns you happier customers, positive word of mouth and not least reduced development and support costs.**

Explore the ground-breaking promise of iX HMI

The iX HMI solution affords significant advantages in design, functionality and information exchange that will greatly reduce engineering time. Smart engineering tools and an improved ribbon menu set in a familiar Windows® based environment guarantee substantial time gains for project developers.

Putting the user in focus
Clear and flexible objects let you provide a user-friendly interface that offers efficient operation with short introduction time, increasing productivity on the spot. And advanced vector-based graphics provide your application with a professional look to give it that competitive edge.

New and smarter ways to navigate
You can explore modern controlling that's inspired by modern mobile devices. Use familiar scroll and swipe gestures to make your application easier, faster and more efficient to navigate and save valuable screen space while you're doing it.

It's easy to shape your application in new ways that create visual expressions more in line with the system. Simply profile your application to harmonize with a company brand to give your projects a new and inspiring dimension.

iX HMI takes you from idea to result faster than ever, making your projects as easy to complete as they were to imagine.

Combining the best of two worlds

iX HMI SoftControl is a combination of two great automation products - the iX HMI solution and CODESYS. Thanks to the power of modern technology, the operator interface and the control logic can be united in one single compact hardware device. Just add standard remote I/Os and you'll get an elegant, scalable and cost-effective solution that is cutting-edge.

The real-time operating system brings the stability of a reliable standard platform.

Flexible configuration and communication
iX HMI SoftControl affords configuration freedom by for example allowing you to choose the number of remote I/Os. As the soft control functionality lies in the operator panel rather than as an additionally mounted module on the panel, the unit remains elegantly slim. iX HMI SoftControl supports three fieldbuses to choose from – EtherCAT, Modbus RTU and Modbus TCP.

Capacity to fit any function
Significantly greater memory capacity than a conventional PLC means that graphically advanced interfaces can fit comfortably along with large PLC programs to deliver greatly advanced control. Along with high-speed program execution, machine builders can create far more functionality with more complex control to cover the entire range of relevant functions.

Limitless programming
The choice of five well-known IEC 61131-3 programming languages offers freedom of programming options. Different languages can be mixed to meet the needs of different control solutions. This opens up for a much wider and more flexible functionality than with a conventional PLC.

Get everything you expect and much more
The open architecture and the technologies that accompany .NET Framework make the iX HMI solution truly open and flexible. In addition to the solid, built-in HMI functionality, you can use your own C# scripting and .NET components to further extend functionality to meet specialized demands. iX fully supports your ideas without slowing you down.

Hardware and software made for each other
With the iX HMI SoftControl series any small, medium or large sized HMI application can have an intuitive graphic iX interface with total CODESYS control. The panels ranging from 4 to 15 inches offer high performance CPUs and the latest screen technology with LED backlight resulting in an easy-to-read clear screen with wide viewing angles. Quick and easy to mount, the slim hardware dimensions make the panels convenient to install.

Power to the programmer with iX HMI SoftControl, combining two cutting-edge softwares. Operator panels are available in sizes from 4 to 15 inches.

Evolutionary inside

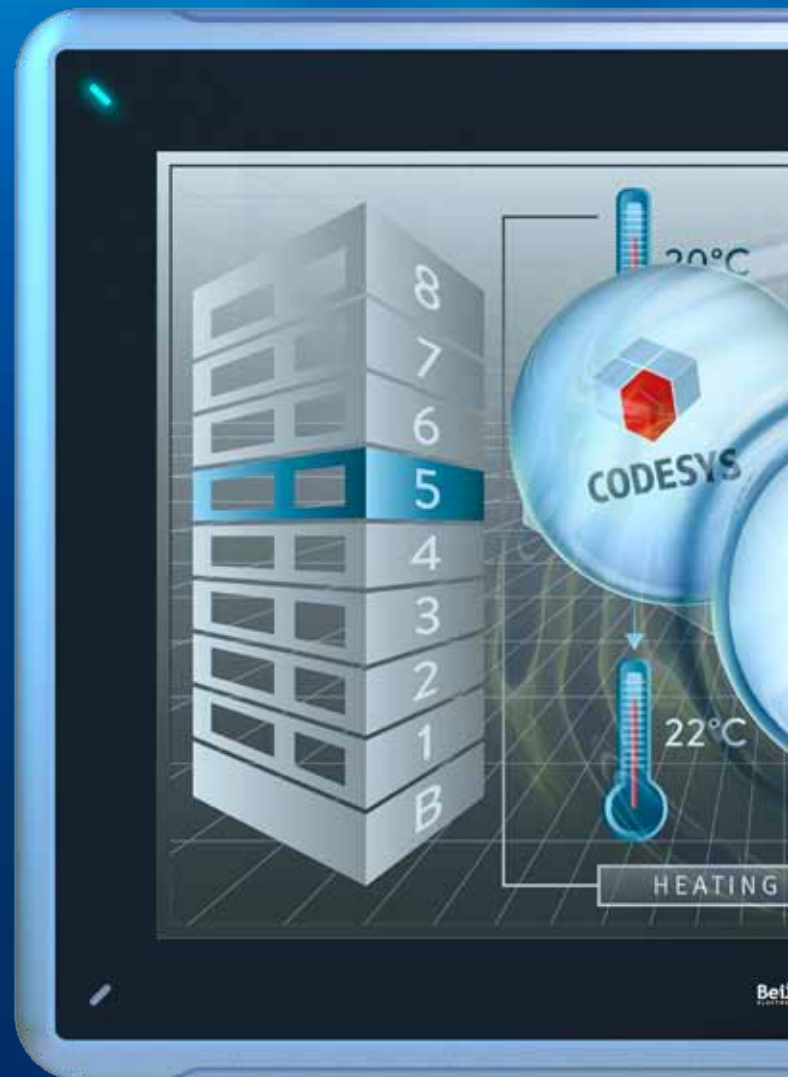## Integrated soft control puts creative efficiency in your hands

Integrated HMI and PLC functionality is easy-to-use and cost efficient, making it simpler for system designers to build smaller, smarter machines, faster than ever before. Elegantly designed yet simple to use, the most eye-opening aspects of this product are the ones you don't actually see.

Eliminate development steps
Programming and communication between two separate systems, PLC and an HMI, always meant a lot to double-check and twice the risk of error. iX HMI SoftControl changes all that. Simply import the CODESYS tag-list into the iX software and you're done! All changes in CODESYS are reflected in iX. It's much easier to create applications with less risk and no need to think about which cable to use or what parameters to set. It's easier to change and easier to troubleshoot.

Why unify PLC and HMI?
iX HMI SoftControl combines visualization and control in an integrated development environment that facilitates faster system design. It also reduces construction costs by eliminating components and wiring and reduces support costs while improving operations by centralizing remote access and administration. iX HMI SoftControl is the next step in control evolution.

" Integrating HMI and PLC functionality in the operator panel provides a lean automation solution for enhanced efficiency.

CODESYS transforms ideas into projects

Make your projects as quick and easy to carry out as they were to visualize. CODESYS is the leading hardware-independent IEC 61131-3 development tool on the market.

The industry standard in controller and PLC programming, CODESYS fits hand-in-glove with iX software. They exchange data easily and have fundamental similarities, both in terms of openness and communication. CODESYS offers:
- Excellent debugging and online/offline programming
- Built-in PLC simulator
- Easy-to-use fieldbus configuration and integration

Fulfilling the diverse requirements of modern industrial automation projects, CODESYS is:

Integrated – fully integrated development system with everything you need.
Adapted – fully adaptable to your system's requirements.
Embedded – can be embedded in virtually any system structure with interfaces.
Powerful – integrated compilers, object-oriented programming, alarm management and add-ons like UML or SYN integration are just some of the highlight features.
Flexible – select the CPU platform, operating system or type and manufacturer of device for your application.
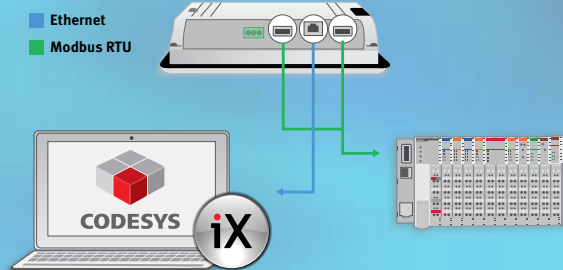
CODESYS

CODESYS offers transparent code, sharing one common standard to let you transport projects freely between all iX HMI operator panel models.
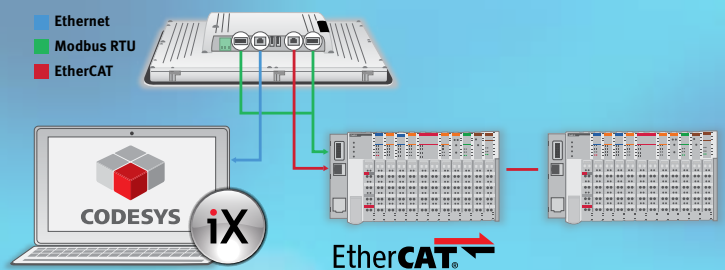
The powerful solution for projects of all sizes

iX HMI SoftControl satisfies demanding HMI applications from small to large projects within traditional industrial or process industry, where there is a requirement for complex operating screens filled with objects. This solution delivers high performance hardware that is finely tuned for iX HMI solutions. Display sizes vary from 4 to 15 inches.

iX TxA SoftControl

■ Ethernet
■ Modbus RTU

iX TxB SoftControl

■ Ethernet
■ Modbus RTU
■ EtherCAT

Technical data	iX TxA SoftControl			iX TxB SoftControl		
	iX T4A-SC	**iX T7A-SC**	**iX T10A-SC**	**iX T7B-SC**	**iX T12B-SC**	**iX T15B-SC**
General Description						
HMI development software	iX Developer 1.31 or above	iX Developer 1.31 or above	iX Developer 1.31 or above	iX Developer 2.0 or above	iX Developer 2.0 or above	iX Developer 2.0 or above
System Info						
RAM	128MB	128MB	128MB	1 GB	1 GB	1 GB
CPU	400MHz ARM9	400MHz ARM9	400MHz ARM9	Intel® Atom	Intel® Atom	Intel® Atom
Application storage	80 MB	80 MB	80 MB	1.4 GB	1.4 GB	1.4 GB
SoftControl						
Persistent retain memory	16 Kbyte	16 Kbyte	16 Kbyte	32 Kbyte	32 Kbyte	32 Kbyte
SoftControl development software	CODESYS 3.5	CODESYS 3.5	CODESYS 3.5	CODESYS 3.5	CODESYS 3.5	CODESYS 3.5
Remote I/O bus	Modbus RTU	Modbus RTU	Modbus RTU	EtherCAT, Modbus RTU, Modbus TCP	EtherCAT, Modbus RTU, Modbus TCP	EtherCAT, Modbus RTU, Modbus TCP
Display						
Type	TFT-LCD	TFT-LCD	TFT-LCD	TFT-LCD	TFT-LCD	TFT-LCD
Size	4,3"	7" 800×480 pixels	10" 640×480 pixels	7" 800×480 pixels	12" 1280×800 pixels	15" 1280×800 pixels
Backlight lifetime	50 000 h	20 000 h	50 000 h	50 000 h	50 000 h	50 000 h
Brightness	350 cd/m²	350 cd/m²	450 cd/m²	500 cd/m²	400 cd/m²	450 cd/m²
Power						
Power consumption	3,6 W	6 W	9,6 W	14 W	22 W	24 W
Voltage	+24 V DC (18-32 V DC)	+24 V DC (18-32 V DC)	+24 V DC (18-32 V DC)	+24 V DC (18-32 V DC)	+24 V DC (18-32 V DC)	+24 V DC (18-32 V DC)
Mechanical						
Size	145×103×43 mm	204×143×43 mm	280×228×44 mm	204×143×50 mm	340×242,2×57mm	410×286×61mm
Weight	0,5 Kg	0,8 Kg	1,5 Kg	0,9 Kg	2,5 Kg	3,6 Kg
Serial Communication						
Com 1	RS232 (RTS/CTS)	RS232 (RTS/CTS)	RS232 (RTS/CTS)	RS232 (RTS/CTS)	RS232 (RTS/CTS)	RS232 (RTS/CTS)
Com 2	RS422/RS485	RS422/RS485	RS422/RS485	RS422/RS485	RS422/RS485	RS422/RS485
Com 3	RS232	RS232	RS232	RS232	RS232	RS232
Com 4	RS422 (RTS)/RS485	RS422 (RTS)/RS485	RS422 (RTS)/RS485	RS422 (RTS)/RS485	RS422 (RTS)/RS485	RS422 (RTS)/RS485
Ethernet						
Ethernet 1	1×10/100 Mbit/s (shielded RJ 45)	1×10/100 Mbit/s (shielded RJ 45)	1×10/100 Mbit/s (shielded RJ 45)	1×10/100 Mbit/s (shielded RJ 45)	1×10/100 Mbit/s (shielded RJ 45)	1×10/100 Mbit/s (shielded RJ 45)
Ethernet 2	N/A	N/A	N/A	1 ×10/100/1000 Mbit/s (shielded RJ 45)	1×10/100/1000 Mbit/s (shielded RJ 45)	1×10/100/1000 Mbit/s (shielded RJ 45)
Expansion						
USB	1×USB Host 2.0, max output current 200mA	1×USB Host 2.0, max output current 200mA	1×USB Host 2.0, max output current 200mA	3×USB Host 2.0, max output current 500mA	3×USB Host 2.0, max output current 500mA	3×USB Host 2.0, max output current 500mA
Memory expansion	1×SD card	1×SD card	1×SD card	1×SD card	1×SD card	1×SD card
iX field buss expansion	yes	yes	yes	yes	yes	yes
Certifications						
UL	UL508 *pending	UL508 *pending	UL508 *pending	UL508	UL508	UL508
DNV	DNV EMC class A *pending	DNV EMC class A	DNV EMC class A *pending	N/A	N/A	N/A
CE	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.
Environmental						
Operating temperature	-10° to +60°C	-10° to +60°C	-10° to +60°C	-10° to +50°C	-10° to +50°C	-10° to +50°C
Sealing - front panel	IP65	IP65	IP65	IP65	IP65	IP65

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 22 countries and sales of 1,367 MSEK 2012. The company is listed on the NASDAQ OMX Nordic Stockholm Small Cap list under the ticker BELE.

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Ålesund		

Beijer
ELECTRONICS

Head office
Beijer Electronics AB
Box 426, Stora Varvsgatan 13a
SE-201 24 Malmö, Sweden

www.beijer.se | +46 40 35 86 00