iX HMI Rugged

EN60945

iX T15BR

Proven to the extremes

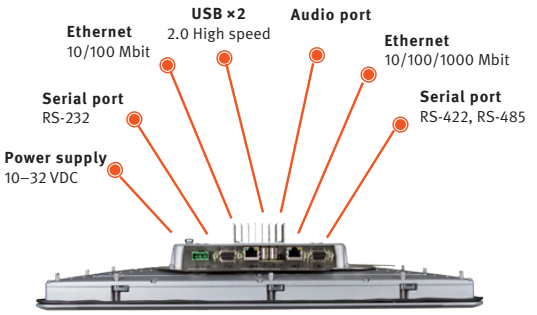
Operating in extreme environments is tough stuff. So we designed the rugged iX HMI operator panel to give you a long and productive service life, no matter how rough it gets. Whether hit by wind, snow and rain, working on heavy duty motors in remote locations, or in a steamy offshore engine room.

The iX T15BR is certified by major classification societies for hazardous environments (UL, IECEx, ATEX) as well as to marine standards (ABS,DNV, GL, LR, KR) for use on vessels and off-shore installations. The panel is designed to NEMA 4X and IP66 standards with a high-resolution touch-screen.

The iX HMI software is another reason to love our hardware and empowers you with unique tools to communicate. It combines top-class vector graphics and smarter functions that provide intuitive operation on the spot. Not to mention the almost limitless connectivity to your other equipment through the extensive list of drivers.

- Bright 15.4”, 1280 × 800 pixel, LED lighted, TFT color display (450 or 1,000 cd/m² sunlight viewable)
- Extended environmental capabilities including operating temperature rating of -30 to 70 °C
- NEMA 4X / IP66 sealing
- Operates in high vibration environments
- Hazardous area and marine certifications
- 2 × Ethernet, 2 × serial, 3 × USB standard; 2 × CiX CAN ports optional
- iX HMI software with universal connectivity with your automation equipment

Beijer ELECTRONICS



Technical data		iX T15BR
Display	Type	1280 × 800, TFT Color LCD
	Size	15.4”
	Lighting	White LED
	Brightness	450 cd/m² or 1,000 cd/m²
Touch screen	Type	Analog-resistive (matte or gloss)
Interfaces	Ethernet	1 × 10/100Base-T, 1 ×10/100/1000Base-T
	Serial	1 × RS232, 1 × RS422/485 (isolated)
	USB	3 × USB 2.0 high speed
	Audio	Headphone or speaker connector
	Communication modules	CiX CAN module (optional): 2 × galvanically isolated ports
Processor	Type	Intel® Atom (1.0 or 1.6 GHz)
Memory	RAM	1 GB DDR2
	Flash	4 GB
	External storage media	One SD card slot
Realtime clock	Standard	Battery-backed
Power	Input voltage	12 or 24 VDC (10-32 VDC)
	Consumption	28 W typical @ 24 VDC
Mechanical	Type	Panel-mount
	Size W×H×D	410 × 286 × 83 mm
	Cut-out dimensions W×H	394 × 270 mm
	Mass	4.5 kg
	Housing material	Powder-coated aluminum
Environmental	Ingress protection	IP66 , NEMA 4X front panel
	Temperature	Operating: -30 to 70 °C; Storage: -40 to 85 °C
	Vibration/shock	4g RMS / 40g 11ms half sine
Certifications	UL	UL/cUL 508, UL50E Type 4X Outdoor
	Marine	DNV, GL, ABS, LR, KR
	Hazardous	UL/cUL Class I Div 2, ATEX (Zone 2), IECEx (Zone 2)
	CE	EN61000-6-4, EN61000-6-2
Software	Development environments	iX Developer
	Runtime environments	iX HMI software

Certifications

The iX T15BR carries certifications for the environments in which it is designed to function.

Industrial certifications

UL 508 - This UL listing mark on an industrial control panel provides evidence of third party certification for safety for industrial control equipment. The iX T15BR is listed for both US and Canadian operation.

UL 50E Type 4X Outdoor – This is an additional UL listing for panel safety that assures the panel will meet the environmental requirements for intended operation.

CE - The iX T15BR has been tested by a NRTL to show compliance with the CE mark requirements for industrial panels which allows the product to be sold within the European Economic Area (EEA). The iX T15BR has been tested and shown to meet safety, emissions and susceptibility requirements including EN61000-6-4 and EN61000-6-2.

Hazardous area certifications

The iX T15BR has certifications to allow operation in hazardous environments - specifically areas or zones where hazardous gases and vapors may be present.

UL Class I Div 2 is the North American directive.

ATEX Zone 2 is the European directive.

IECEx Zone 2 is similar to the ATEX directive but used by additional countries outside North America and Europe.

Marine certifications

Additionally the iX T15BR has been tested and certified to meet marine standards that are established to ensure that ships and their equipment are constructed safely. Since the design of the iX T15BR allows operation in extreme environmental conditions the unit can meet extended classes of marine certifications not normally carried by marine HMIs. Having both marine and the above mentioned hazardous location certifications is also a unique feature of this terminal.

There are dozens of certifying agencies around the world. The following apply to the iX T15BR.

DNV (Det Norske Veritas) is a Norwegian certification.
Temperature: Class D
Humidity: Class B
Vibration: Class B
EMC: Class B
Enclosure: Class B

GL (Germanischer Lloyd) is a German certification.

ABS (American Bureau of Shipping) is a North American certification. Certified according to iX T15BR specifications.

LR (Lloyd's Register) is a UK certification.
ENV1, ENV2, ENV3, ENV4, ENV5

KR (Korean Register of Shipping) is a Korean shipping, shipbuilding and industrial services classification society.

EN60945 Conforming to this standard allows the HMI to be used on the bridge of a ship within a specified distance from the compass system (ECDIS) along with other criteria.

We perform extensive testing to ensure our line of rugged terminals meet environmental standards and to guarantee reliable operation in most environments. We test in three areas: qualification testing, acceptance testing and sustaining testing.