

Beijer Electronics - your Industrial Intelligence provider

HMI Products is a business area of the Beijer Electronics group. It has over 20 years' experience within automation. HMI Products prides itself on its close, long-term relationships with its distributors, OEMs and brand-label partners.

Our mission is to offer the world's most user-friendly and innovative operator terminals. Furthermore we want to give our customers what we call Industrial Intelligence – products that communicate and transform data into useable information. Data that can be used for people and companies to make correct decisions and ultimately increase their performance and profit.

Beijer Electronics AB is quoted on the Stockholm Stock Exchange. The head office is in Malmö, Sweden with subsidiaries in Germany and the US. For our distributors world-wide, please visit www.beijerelectronics.com

EXTER™

- Intelligent Design



EXTER



BREN0426B 2004-11

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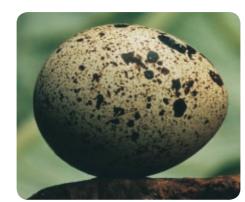
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Intelligent Design

EXTER proves that design is about more than just aesthetics:

Beijer Electronics' development skills and innovative operator terminals are a result of more than 20 years accumulated experience in HMI.

Together with industrial designers, Beijer Electronics has created EXTER's mechanical layout, utilizing customer input and taking into account current and future HMI operating requirements. The industrial designers helped to perfect the functional and inviting design: EXTER's modern aluminum frame in silver and steel effect not only looks elegant, it also ensures robust construction and improves EMC resistance. In the same way, the attractive front also withstands harsh environments. Furthermore, the slim form and narrow depth of less than 60 mm for all models makes EXTER space efficient and easy to place in all sorts of applications.



an applied weight evenly. An experiment found that an egg withstands the pressure of an average mass of 5.1468 kg. Source: Physics Department, Mount Allison University, Canada

Clever features for efficient communication

Communication is made easy with EXTER:

Each operator terminal has a built-in web server with its own web address.

The HMI series has SMTP functionality, allowing the sending of alarms and attached text reports as e-mails. Data such as trend information and recipes can be sent from the terminals using the FTP functionality. The operator terminal is also equipped with USB ports and built-in Ethernet.

EXTER provides remote maintenance and management possibilities for both the operator terminal and the controller system. Security levels defined in the application can protect this openness. EXTER can also act as both server and client in an Ethernet network.

The dual driver functionality enables communication with, and data exchange between, two controller systems. Thanks to the wide selection of drivers, communication is possible independent of manufacturer or type of equipment. The drivers are simple to configure, and are always available for easy updates in the configuration software.



Each mature dandelion seed has a white parachute, easily catching the wind. The average distance a dandelion seed can travel by wind is 10 kilometres.

Pushing the boundaries of user-friendliness



Feathers provide warmth, waterproofing, camouflage and aerodynamic form. In the fall, a bird adds extra feathers and by fluffing its plumage, insulation increases up to 150% compared to insulation provided in summer. Source: Encyclopædia Britannica and Natural History Magazine

EXTER is user-friendly in every detail:

EXTER's ergonomic key layout has a logical placement of operating keys, text strips and LEDs. The familiar layout of the operating keys and their intuitive symbols are inspired by modern PC keyboard design so they can be easily understood.

The high-resolution, deep-color TFT display gives a clear, detailed image and ensures optimal viewing and large viewing angles in all conditions.

EXTER is easily mounted with the brackets that pull the operator terminal tightly against the cabinet by applying pressure to the inside of the cabinet. This saves time as there is no need to drill any holes for fastening screws.

The configuration software Information Designer is a truly user-friendly tool: A large number of ready-made objects and functions make it quick and easy to create applications by pointing and placing on the screen. Information Designer illustrates what the application will look like in real life, and enables simulation of the project. This saves valuable time for the developer, as does the option of choosing between six menu languages.

The standard Windows fonts help create a user-friendly look for the operator, and the possibility to present the application in many different languages also provides ease-of-use.

The same software is used for programming all EXTER operator terminals as well as the CIMREX series and accessories. This provides the developer with flexibility: A project is easily scaled from one EXTER model to another, and CIMREX projects are simple to convert to EXTER products.

Powerful technology



The thread of spider silk is one-tenth of the thickness of a human hair, yet the spider web can trap a bee flying at $% \left(1\right) =\left(1\right) \left(1\right) \left($ 32 km/hour without breaking. Source: University of British Columbia, Canad

EXTER employs state-of-the-art technology in both the hardware and software design:

The intelligence behind the HMI series is the new Intel® PXA270 processor, delivering cutting edge performance. This processor, with Intel XScale® technology, provides enough processing power and memory for all sorts of HMI applications, in all sorts of industries

EXTER utilizes the Windows® CE.NET operating system. The CE.NET version 4.2 is a stable and reliable platform, which has proven its resilience in many industrial products. In addition, the powerful Intel® PXA270 processor with its Intel XScale® technology is perfectly suited for running Windows® CE.NET.

The Intel® Persistent Storage Manager keeps data safe when closing the operator terminal, and ensures that system files and data are not corrupted in case of power failure or

The EXTER series has IP65 front cover protection degree, and complies with CE (EMC), UL and DNV standards.

EXTER™ series overview

The EXTER series consists of five different models more information about the models below.

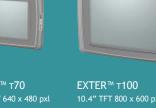
	Touch operator terminal	s	Keypad opera		ator terminals
EXTER™ T70	EXTER™ ⊤100	EXTER™ ⊤150		ER™ к70	EXTER™ K100
6.5" TFT 640 x 480 pxl	10.4" TFT 800 x 600 pxl	15.1" TFT 1024 x 768 pxl		Г 640 x 480 pxl	10.4" TFT 800 x 600 pxl

LEDs LEDs LEDs LEDs LEDs LEDs LEDs LEMBERS Bot USB Host USB Host USB Host USB Host USB Device R5485/R5422 25-pin D-sub contact (R5485 available through R5422 with software setting) R5232C 9-pin D-sub contact Processor A16 MHz RISC CPU (Intel XScale) Memory, flash Aemory, RAM Aemory, RAM Aemory, expansion CompactFlash slot available for adding optional cards for expansion of memory, data back-up, data storage and transfer of data and projects Buzzer Yes Real-time clock Supply voltage Ambient temperature O - 50 °C Relative humidity Text strips) text strips) Lext strips Lext strip Lext	Hardware specifications						
Function keys LEDS 16 (8 with integrated text strips) 16 (8 integrated with key and text strips) 16 (8 integrated with key and text strips) 16 (8 integrated with key and text strip) 16 (8 integrated with key and text strip) 17	Display type	Graphic 64K color TFT-LCD, resistive touch					
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Power consumption Max 2 A Ambient temperature 0 - 50 °C Relative humidity 5 - 85 % non condensing	Real-time clock			Yes			
Ambient temperature 0 - 50 °C Relative humidity 5 - 85 % non condensing	Supply voltage	, ,					
Relative humidity 5 - 85 % non condensing	Power consumption	The state of the s					
	Ambient temperature	0 - 50 °C					
Frame and casing material Powder-coated aluminum	Relative humidity	5 - 85 % non condensing					
1 Officer Courted Manimum	Frame and casing material	Powder-coated aluminum					
Cut-out dimensions (mm) 189 x 138 265 x 206 356 x 279 246 x 139 344 x 210	Cut-out dimensions (mm)	189 x 138	265 x 206	356 x 279	246 x 139	344 x 210	
Mounting depth (mm) 55 58 60 56 58	Mounting depth (mm)	55	58	60	56	58	

Approvals and enclosure classes Preliminary information				
EN61000-6-2 immunity				
EN61000-6-4 emission				
UL 1604 Class I, Div. 2				
UL 508				
UL 50				
Yes				
IP65				
IP 20				

ľ	Functionality specificatio	n				
	Network abilities	E-mails (STMP Auth. client)				
		Web server				
		Remote operation via Internet				
		Access to controller system via Internet				
		Transfer of files (FTP server)				
	Dual Drivers with data exchange	Yes				
	Passthrough / Transparent Mode	Yes (dependent on driver)				
	No Protocol Mode	Yes				
	Multiple Languages	Yes, with up to 10 languages in one project				
	Standard Windows fonts (Unicode)	Yes				
	Data Logger	Yes				
	Internal Variables	Yes				
	Historic Trends	Yes				
	Recipe Management	Yes				
	Alarm Management	Yes, with up to 16 groups				
	Time Channels	Yes				
	IO Time Groups	Yes				
	Security Passwords	Yes, up to 8 levels				
	Message Libraries	Yes				
	Macros	Yes				
	Dynamic Objects	Yes				
	Report Printouts	Yes				
	Easy Configuration with	Yes				
	Information Designer	ies				













EXTER™ к70









EXTER's well thought-out form and function give higher performance. Intelligent Design means the HMI series is superior in aesthetics, user-friendliness, ergonomics, functionality and performance. The EXTER operator terminals from Beijer Electronics set a new standard for human machine interfaces, combining clever and modern design with the latest technologies.