

Human Machine Interfaces



More than HMIs

Unbeatable: vector graphics in high-performance hardware

Interactive: communication with several automation devices

Intuitive: object library and easy to use engineering resources



“ Innovative resources, combining advanced graphical tools and a variety of highly functional features.



Excellent resources to make your life easier

Minimize the distance between the idea and reality of your applications with Altus Human Machine Interfaces (HMIs). Combining advanced graphical tools with highly functional features, they stand out by their engineering and design. Rugged and reliable, the equipment features high-performance hardware, especially developed for the graphical solutions it offers. Besides, the flat screen with wider usable area expands even more possibilities for applications with visual complex screens.

User friendly environment, with project templates and predefined screen resources, adds uncountable advantages related to design, functionality and connectivity, reducing engineering time significantly and providing faster payback to your investment.

The portfolio counts on several templates and offers good alternatives for machine manufacturers and process control, depending on your application and budget. The operator's interface is the machine or process face. If interactivity is not perfect, the usability of the whole system drastically decreases. In other words, a flexible and intuitive terminal can be the difference between an inefficient system and a great solution to the end user.



Unbeatable



Superior Graphics Processing

Truly open and versatile, the HMIs offer scalable vector graphics that allow users to import objects and external components. The combination between the high performance processor and the advanced development software offer everything you need to make your application closer to reality.

High Performance Hardware

The hardware allows the product to be differentiated by its engineering and design. Its advanced resources enable quick response to use in the field and superior connectivity for data acquisition with automation systems, making user capable of developing safe applications with superior graphic. Furthermore, the high level of protection (IP) of Altus HMIs allows them to be used in harsh environments, once the frontal screen is completely shielded against dust and water sprays.

Excellence in Touchscreen Displays

The displays and touchscreen devices are also differentials of Altus HMIs. They allow quick interactions with the system and offer long lifespan. The displays are flat, ensuring a dust free surface making visualization easier even in harsh

environments. Equipped with long lifespan backlights, the HMIs also count on TFT technology, which adjust displays brightness. Besides, the widescreen display expands possibilities for complex visual applications.

Versatile and Practical

Developed for any type of application that needs reliable process operation and excellent visual resources, even in compact formats, Altus HMIs are suitable to be used either on process industry, by machine manufacturers or on any factory automation. Customer is allowed to choose from aluminum housing models (which combines the lightness of the body with ruggedness for industrial environments) or plastic housing for low cost applications. Those are ideal interface options for the operator and the automation system, since they lower project costs and increase machine lifespan.



Interactive



“ Ideal solution for industrial applications that use operation and visualization terminals.”

Limitless Connectivity

High availability on serial and Ethernet communication interfaces enables users to find many alternatives for communicating between Human Machine Interfaces and other automation equipments, such as programmable controllers. Among the main available communication drivers, MODBUS RTU and MODBUS TCP are highlights, or also the Client/Server OPC UA.

Through HMIs programming software, users can make simple settings that allow transformations of all generated results produced into individual printed reports directly on Microsoft Excel. It is also possible to store plant momentary data on SQL database, allowing direct link to the company's managing ERP software. Configuration for network data exchange is also very simple, as it allows direct communication with the application's programmable controller, with no need for interface devices. To make work easier, customers can visualize information and application screens remotely,

through their computer, smartphone or tablet. Other advantages to be mentioned are FTP files transfer (database, alarms, among others), import and export incomes on CSV through USB or SD memory card and embedded Web Server.

Users and Rights Management

With this feature, different levels of permissions can be created for groups of users. The developer determines what each member is allowed to do in the system and its restrictions. An example is the generation of logins to create and elimination of revenues (administrator) or for machine revenue readings (operator).



Intuitive

“ Integrated engineering and browsing tools, ensuring efficient development and safe operation.

A Complete Tool

Fast, intuitive and with extensive functionalities, such as revenues, alarms, trend graphics, auditing resources and data and security logging, Altus Human Machine Interfaces offer new efficient ways to develop your application. Among other development software differentials, better manipulation of large projects, screen explorer with zoom, simultaneous objects creation and configuration with one click and automatic application alignment can be highlighted.

Customers can also save configuration time with the Alias function. It enables, in an easy and quick way, reuse of screens without the need of duplications. To complement the tool, all these characteristics are available in a multilingual software with embedded help environment.

Programming Resources

Users can take advantage of open technologies to improve the applications performance, as the use of controls that support Microsoft .NET languages in full integration with Microsoft .NET Framework and development of scripts and logics in c#. Besides, its graphical system uses Microsoft WPF technology for complete user interfaces creation with real time value mapping and process tags.

Designed for your Challenges

All features that compose the HMIs make them the best solutions available in the market for any type of applications. Demanding lower investment in engineering hours, they enable the development of modular software, replicating projects and increasing incomes. Intuitive and friendly, they deliver optimal advantages to users. The portfolio counts on a vast array of panels (from textual monochromatic to color up to 15”), according to the user’s needs. The screens can be developed in portrait or landscape formats, allowing 90, 180 or 270° rotation.

Simulation

The simulation tool present in the programming software is available for customers to test how their application works. With it, they can simulate, debug and evaluate their project before sending it to the hardware. This allows errors to be anticipated during planning and specification stages, reducing failures in engineering projects.



Human Machine Interfaces

iX Series combines advanced graphic tools and a selection of highly functional features for machine and process automation. The Series is a truly open platform differentiated by its engineering and product design.

Series	Code	Type of Display	Operation	Size	Serial	Ethernet
iX	IX-T5F	Color	Touchscreen	4.7" LCD-TFT	1x RS-232, 1x RS-422/485	1x 10/100 BASE-TX
	IX-T7F	Color	Touchscreen	7" LCD-TFT	1x RS-232, 1x RS-422/485	1x 10/100 BASE-TX
	IX-T10F	Color	Touchscreen	10" LCD-TFT	1x RS-232, 1x RS-422/485	1x 10/100 BASE-TX
	IX-T4A	Color	Touchscreen	4.3" LCD-TFT	2x RS-232, 2x RS-422/485	1x 10/100 BASE-TX
	IX-T7A	Color	Touchscreen	7" LCD-TFT	2x RS-232, 2x RS-422/485	1x 10/100 BASE-TX
	IX-T10A	Color	Touchscreen	10.7" LCD-TFT	2x RS-232, 2x RS-422/485	1x 10/100 BASE-TX

Exter Series offers ergonomic and rugged design with high levels of protection, which facilitates installation in harsh industrial environments.

Series	Code	Type of Display	Operation	Size	Serial	Ethernet
Exter	EX-K10M	Monochrome	Keyboard	3" LCD-STN	1x RS-232/422/485	-
	EX-T150	Color	Touchscreen	15.1" LCD-TFT	1x RS-232, 1x RS-422/485	1x 10/100 BASE-TX

H-Series is recommended for smaller applications in machine and process control, being very cost-effective, with monochromatic graphic display and keyboard.

Series	Code	Type of Display	Operation	Size	Serial	Ethernet
H	H-K30M-S	Monocromático	Teclado	3" LCD-STN	1x RS-232/422/485	-

Software and Accessories

Series	Code	Description
iX	IX DEVELOPER TxA	iX-TxA Series Programming Software
	IX DEVELOPER TxF	iX-TxF Series Programming Software (Free)
Exter	EX-2700	Exter Series Programming Software - Information Designer
	EM-PROFIBUS DP	PROFIBUS-DP Expansion Board for Exter Series
H	H-2700	H-Series Programming Software - H-Designer (Free)



