

FB-SoftTools™ Series

HELIOS-HMI

Human Machine Interface (HMI) Software Product Overview

Overview

HELIOS-HMI is a package from the FireBus “Soft Tools” library. FB-SoftTools™ are programs designed to compliment, add functionality to, or aid in the design of a wide range of industrial safety systems.

HELIOS-HMI is a “Human Machine Interface” or “HMI” package that provides software mechanisms for gathering information from a variety of control and safety system platforms and then formatting the obtained information in a friendly Graphical User Interface (GUI).

While there are many HMI and GUI packages to choose from HELIOS-HMI was designed specifically for the safety automation market and with the following goals.

- **To provide a modern comprehensive tool set that combines the power and flexibility of a full featured scripting engine along with the simplicity of a graphical “point & click” configuration environment.**
- **To include multiple concurrent interface options and support for the industries most popular communication protocols along with the ability to share data coming from any connected source with other systems and networks.**
- **A full featured graphic engine that supports anything from standard displays to HDTV formats, multiple displays, and rich media such as multiple real time video streams.**
- **A robust event/alarm/data tracking engine for keeping track of whats going on regardless of its origin within the system and being able to access this information utilizing modern WAN technologies such as Wi-Fi, cellular phones and PDAs.**

HELIOS-HMI™ exemplifies the type of flexible full featured and user friendly HMI solution needed for today's more advanced safety system platforms.



Features

Unlimited tag count¹

Tag types:

- Analog
- Digital
- Host - Analog, Digital, Analog Pointer

Wide range of industrial protocol drivers.

Unlimited external connections¹

Unlimited graphic screens¹

- HTTP Web server:
- 100% HTML
- Low bandwidth
- unlimited clients
- view/change any tag
- view logs

Camera snapshots

Graphic screen snapshots

OPC Support:

- OPC Data Access Server (DA 2.xx)
- OPC Foundation Compliance Report
- OPC Data Access Client (Redundant -Hot Standby)
- DA 1.xx, DA 2.xx, DA 3.xx, DA XML 1.xx
- Item ID of server can be tagname
- Configured items can be published on server side

Extensive help files

Full Featured Graphics Editor supporting:

- Lines, Arc, Rectangle, Circles, Bitmaps, Polygons, etc.
- Grouping with editing/animations
- Grids
- Polygon editing
- Gradient fills
- Buttons, Gauges, Sliders, etc
- Commands Wizard
- Unlimited graphic screens
- Runtime screen printing

User Graphic Library

Complex MA (Manual/Automatic) graphic object

Integrated Development Environment:

- Runtime Editing
- Debugging
- Runtime scripts are compiled

Scripting engine (not required for graphic animation or user interaction) Script commands:

AcknowledgeCommand, Add, AddDigital, AllTrue, AnyTrue, Average, CloseAlarmLogWindow, CloseAlarmWindow, CloseAllUserWindows, CloseEventWindow, ClosePortDiagnosticWindow, CloseTagMonitorWindow, CloseAWindow, ExecuteScript, GetSystemVariable, GetUserInputBoolean, GetUserInputBoolean4, GetUserInputDate, GetUserInputFloat, GetUserInputInteger, GlobalGet, GlobalSet, LaunchApplication, LogEvent, LogOff, LogOn, MousePosition, OpenAlarmLogWindow, OpenAlarmWindow, OpenAWindow, OpenAWindowEx, OpenDriveStatusWindow, OpenEventWindow, OpenPortDiagnosticWindow, OpenTagMonitorWindow, OpenWindowUserSelect, PlayBeep, PlaySound, PrintScreen, ReadValue, SetAlarmEnables, SetMAStationConfigurationName, SetPortReadEnable, SetWindowDate, SilenceAcknowledgeCommand, SilenceCommand, StartCameraRecording, StopCameraRecording, TimerGet, TimerSet, Valve2Input, WriteValue, WriteValuePulse

Trending

Event/Alarm/Data Handling Engine:

Events, Alarms, Data, Event logging, Alarm logging, Data logging, Alarm grouping, Runtime alarm enable/disable, Email/SMS notification (optional acknowledgment)

Video in user windows:

- Frame capture
- Recording to AVI (10 fps)
- Video for Windows
- IP Camera
- Motion detection
- Video interface to FM3260 Flame Detectors

Hard drive free space monitoring and alarming.

Computer hardware minimum requirements:

- Windows XP Professional (SP2)
- Pentium III 500 MHz or higher
- 256MB of RAM
- USB 1.1 port
- SVGA (800 X 600) or higher resolution display

Computer hardware requirements using video inputs:

- Windows XP Professional (SP2)
- Core 2 Duo 2GHz or higher
- 2GM of RAM
- USB 1.1 port
- XGA (1024 X 768) or higher resolution display
- 256MB Video card

HELIOS-HMI Drivers

Rockwell Automation - Allen-Bradley:

- A/B DF1 (Redundant - Hot Standby)
- PLC5, SLC500, SLC 5/01 - 5/05, MicroLogix
- A/B Ethernet (Redundant - Hot Standby)
- ControlLogix, CompactLogix, FlexLogix,
- RSLink not required, No third party driver required

Bacnet/IP (Redundant - Hot Standby)

- Analog Input, Analog Output, Analog Value
- Binary Input, Binary Output, Binary Value, Loop
- Multi State Input, Multi State Output, Averaging
- Multi State Value, Life Safety Point, Life Safety Zone
- Read Property, Write Property

GE SNP-X (Redundant - Hot Standby)

- All register types
- Long break or long break free

FireBus FB-8000 Process & FB-8800 Safety System (Redundant - Hot Standby)

- Modbus TCP & Serial
- All register types
- Long break or long break free

K-Sequence (Redundant - Hot Standby)

- Automation Direct (DirectLogic, Koyo)
- All register types

Mewtocol-COM (Panasonic/Matsushita/Aromat/NAIS) (Redundant - Hot Standby)

Mitsubishi FX 0,1,2,3 (Redundant - Hot Standby)

- All register types
- Bit, Word, Longword, Float

MODBUS/J-Bus Serial (RS-232) RTU (Redundant - Hot Standby)

MODBUS/J-Bus Serial (RS-485) RTU

MODBUS/J-Bus TCP/IP RTU (Redundant - Hot Standby)

Omron Hostlink/SYSMAC-WAY (Redundant - Hot Standby)

- All register types
- Bit, Word, Longword, Float

Siemens S7-200 (PPI) (Redundant - Hot Standby)

- Inputs, Outputs, Analog Inputs, Analog Outputs,
- Variable memory, Timers, Counters, Special memory,
- All data types - bit, byte, word, double word, float, timer, counter

Siemens S7-300/400 (MPI) (Redundant - Hot Standby)

- Inputs, Outputs, Internal memory, Timers, Counters
- All data types - bit, byte, word, double word, float, timer, counter

¹Not limited by Helios software as long as adequate hardware resources are available; i.e. RAM, hard disk space, network or other physical interface, video subsystems, and CPU power.



FireBus Systems, Inc. is an OPC Foundation member and HELIOS-HMI™ has been tested and proven to comply with its standards.