HMI’s

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Overview

SoftPLC Web Studio HMI’s (Models SSHx) are Windows PCs that embed a runtime license for SoftPLC Web Studio SCADA software. Touchscreen PanelPC models are available in 7-21 inch screen sizes. We also offer “headless” HMI’s for applications where the monitor needs to be mounted separately or is not needed.

Many of our HMI’s are "drop-in" replacements for obsolete A-B PanelView’s. Application conversion utilities make it easy to replace these old HMI’s.

Applications are developed using the Web Studio development software, and the same application can be downloaded to any SSH HMI.

Loaded with features, yet easy to use, applications can include:

- Object oriented graphic displays with customizable objects
- Extensive graphics library, or use imported files from more than 15 formats
- Data Logging & Reporting
- Real-time & Historical Trending
- Alarm & Recipe Management
- Tag database with variety of data types
- Programming via flexible scripting language, with over 100 standard functions
- Automatic language translation (Unicode supported)

Typical Hardware Features

All standard SSHx HMI models include the features below. Detailed specifications by model are on the data sheets linked from the table in the Models tab.

- High Resolution Touchscreen display*
- Bright display with wide viewing angle*
- Ethernet, Serial & USB communication ports
- Fanless operation, IP66 (NEMA 4/4X) front panel
- Suitable for industrial environments
- Panel Mounting *(wall/tabletop/rack mount options on some models)*

* except for Headless version

Our standard models and specifications meet the needs of most industrial applications. Some SSHx models can be customized with options such as less/more memory, type/size of disk storage, other operating system(s), etc.

We can also provide HMI's with more robust ratings for harsh environments or other specialty needs such as very large displays, tablets, etc. If you need an HMI that offers something other than our standard models, please contact us to discuss your specific application and/or needs.

Headless Models

For applications where a PanelPC is not the best solution, we offer "Headless" HMI's *(also known as Virtual HMI's)*, where the monitoring/control element is physically separated from the display component. Our Headless HMI's are small VESA or DIN-rail mount embedded PC's that can reside in the control cabinet with the PLC/drives, or attach onto the back of a monitor. The Headless HMI embeds the SoftPLC Web Studio software and can be used with separate display devices or with no display at all. Provide your own display device, or we can quote a variety of industrial touchscreen monitors from 7" sizes and up.

Applications

Some uses of a headless HMI are:

- Use of large, high-resolution wall mounted display(s) or TV's; such as in a control room or where multiple people need to view the display, or multiple displays are desired
- Applications where the monitor needs to be mounted at a distance from the control cabinet
- Applications where no display is needed; such as data logging/reporting/SQL database
- Applications where a phone/tablet or other web browser interface is sufficient; such as extreme outdoor environments, remotely located systems, or where interface is for configuration/troubleshooting only

Another popular reason to use a headless HMI is the ability to purchase or replace the display separately, saving cost over purchasing a combination PanelPC unit, such as:

- Applications where the display must meet stringent environmental requirements, such as stainless-steel, wash-down (NEMA4X), hazardous or marine ratings, etc.
- Applications where a touchscreen might be frequently damaged, such as outdoor installations, vehicle mounted systems, or heavy industrial
- When an inexpensive "throw-away" non-industrial monitor + keyboard/mouse is a better solution than a touchscreen

* *Models SSHI-0Dx only*

Display Device Options

* Monitors / Touchscreens * Flat-screen TV's * Projectors + Using Web Studio's Thin Client feature or an SSH-xL (Linux) model, display devices can also include: + * Computers / Laptops * Tablets * Smart Phones

Available Models

MODEL SELECTION

Most Web Studio software features are available on all HMI models. Features that are limited or not available for the Windows Compact Embedded or Embedded Standard operating system are outlined in this document.

PANEL PC TOUCHSCREEN MODELS

Display Size	Operating System	Catalog Number
7"	Win10 IoT	SSHC-7Xx
	Win10 Pro	SSHC-7Wx
10.1"	Win10 IoT	SSHC-10Xx
	Win10 Pro	SSHC-10Wx
12.1"	Win10 IoT	SSHC-12Xx
	Win10 Pro	SSHC-12Wx
15"	Win10 IoT	SSHC-15Xx
	Win10 Pro	SSHI-15Wx
17"	Win10 IoT	SSHC-17Xx
	Win10 Pro	SSHI-17Wx
19"	Win10 IoT	SSHI-19Xx
21.5"	Win10 IoT	SSHI-21Xx

Win10 IoT = Windows 10 IoT LTSC Entry
WinPro = Windows 10 Professional

HEADLESS (VIRTUAL HMI) MODELS

Monitor Port(s)	Operating System	Catalog Number	Test1	Test2	Test3
Class 1/Div 2 Rated DVI-D/VGA	Win10 IoT	SSHC-0ZXx	Test1 longer and longer	Test2 longer and longer	Test3longer and longer
HDMI/DVI or VGA	Win10 IoT	SSHI-0DXx	Test1	Test2	Test3
	Win10 Pro	SSHI-0DWx	Test1	Test2	Test3

Resources

Specifications

SoftPLC Web Studio HMI Data Sheet:: Common features of all SoftPLC Web Studio HMIs. Specific hardware specifications can be found on each Model's individual data sheet.

SoftPLC Web Studio Data Sheet

Software features of SoftPLC Web Studio and Development system.

Current Driver/Protocol List

link:http://softplc.com/downloads/specs/runtime_features_comparison.pdf[Features

Comparison by Operating System]

Web Studio features available for each operating system. Some features are limited or not available on embedded O/S.

Demo - Evaluation Software

This evaluation version is a full working product installation that allows up to 40 hours development, and 1 hour runtime each session. A demo application is also included to show the various product features. Product documentation and a tutorial is built into the help system, and supplemental documents such as application notes and communication driver manuals are installed as part of the image.

SoftPLC Web Studio Software/Demo