# Catalog | May 2022



# Harmony ST6

# High-resolution and cost-efficient basic HMI





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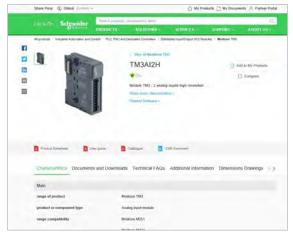


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### Harmony ST6 High-resolution and cost-efficient basic HMI

#### Harmony ST6

Basic, web, and modular HMI panels



Harmony ST6

Harmony ST6 HMI panels range in sizes from 4" to 15" wide combining the exceptional quality of good graphics and stylish design. They are available in basic, modular, web and Edge Box. The ST6 and STM6 panels offer an improved user operation experience through an intuitive design powered by EcoStruxure Operator Terminal Expert software. The STW6 panels have a pre-installed browser that provides a ready-to-use agnostic terminal allowing all devices to be visualized within an HTML5 server.

The Edge Box HMI ,thanks to the power of EcoStruxure ™ Machine SCADA Expert software , provides an affordable Box to get ready for Cloud Services

EcoStruxure Machine brings together key technologies for product connectivity and on-premise edge control, and cloud technologies to provide analytics and digital services. EcoStruxure Machine helps you bring more innovation and added value to your customers throughout the entire machine life cycle.

The Harmony ST6/STW6/STM6 and the Edge Box HMI versions meet IIoT challenges at the Connected Products level, by providing secure communication, connectivity, and efficiency to the required software and applications at the Edge Control level, thus opening up more business opportunities.



#### Refined hardware design

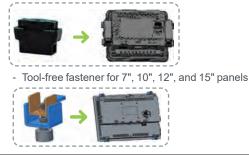
> A well-finished appearance: CNC machining, processing, and color coating like a smartphone gives it a high-grade finish



#### Easy to install

> Quick mounting without screwdriver for ST6/STW6 panels:

- Spring clip for 4" panel (1)



(1) This accessory has to be ordered separately.

### Harmony ST6 An HMI adapted for IIoT and cybersecurity

#### Schneider Electric

# General presentation (continued)

# Harmony ST6

High-resolution and cost-efficient basic HMI

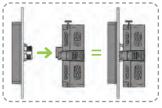
#### Easy to install (continued)

 Electronic manual via QR code for easy in-field maintenance without PC or paper for all ST6 panels



> Easy like a pushbutton mounting for STM6 panels:

Easy mounting on cabinet with 22 mm hole for a fast, no error and tool-free HMI



- Easy for maintenance with modularity

- Easy for applications with separation cable accessory



#### Visualization

- > High-quality wide screen, high resolution with 16 M colors
- > Improved graphics with truetype fonts, gradient, transparency, and anti-aliasing





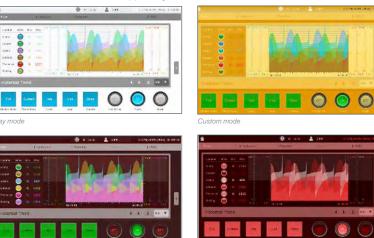


Truetype fonts

Gradient transparency

Anti-aliasing

#### > Theme and color set for supporting situational awareness



Night mod

Alarm mode

### Attractive aesthetics and visualization for simple machines

General presentation (continued)

# Harmony ST6

High-resolution and cost-efficient basic HMI

#### Easy to use

#### Harmony ST6/STM6 basic HMI

> With the Multi Screen function, more information can be displayed in a single screen



Multi-screen function

- With the Layout Objects (Dock Panel) function:
   Several pages can be embedded in one screen and users can navigate in each
- several pages can be embedded in one screen and users can havigate in each section independently
- Screens are automatically resized to fit the frame

- Frame sizes can be dynamically changed to show different content



Layout objects

- > With Web Viewer feature from EcoStruxure Operator Terminal Expert, all Harmony ST6/STM6 products can be visualized and operated remotely on PC/ Tablet/Smartphone
- > With ability to switch between text based script and blockly based script, Designer now have flexibility and efficient way to create custom script operations
- With Mobile Access function from EcoStruxure Machine SCADA Expert , Harmony Edge Box HMI can be visualized and operated remotey on PC/Tablet/ SmartPhone



With Harmony STM6 Gateway Box and Web Viewer function or with the Harmony Edge Box HMI and Mobile Access function, the new Harmony HMISTM6 can become a Faceless HMI for applications that doesn't need a full time operator screen

### 

# General presentation (continued)

# Harmony ST6

High-resolution and cost-efficient basic HMI

#### Easy to use (continued)

#### Harmony STW6 basic web HMI

- > The panel with HTML5 Browser function enables:
- Easy display of Title bar by swiping the top of screen for full navigation
- Access to Menu for configuration of different servers and Web terminals addresses
- · Visualization of all Web content of HTTP servers within industrial devices (1)

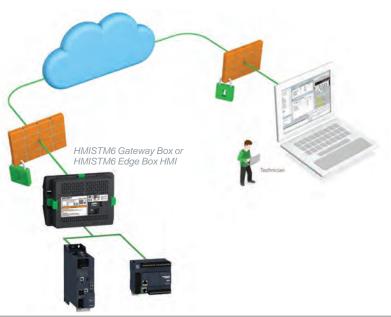


#### Harmony Edge Box HMI

- > EcoStruxure Machine SCADA Expert functions enable storing data everywhere:
- Easy settings of Data for Clouds like Machine Advisor & Aveva Insight Links (No script required)
- Small Edge features with data stamping and data treatment (filter, convert, compute, condition) before transfer to the Cloud.
- Local storage & External DataBase storage

#### **Connected and secure**

- Harmony ST6 offer is uniquely positioned in "Connected Products" within the EcoStruxure platform for enhanced cybersecurity
- > Admin rights required to download projects to HMI target <BuildTime>
- > OP user logged out after predefined idle time <RunTime>
- > Security check performed during booting <CPU>
- > Secure Ethernet download is supported by IPSec and password protected project file (supported in EcoStruxure Operator Terminal Expert v3.1 service pack 1)
- EcoStruxure Secure Connect Advisor allows secure remote access to the device via a private, point-to-point connection (service pre-installed on all Harmony ST6 family) and HMISTM6 Gateway Box or HMISTM6 Edge Box HMI becomes an affordable all access point



(1) As there may be limited access to all features of the HTML5 connected server, please contact your local Schneider Electric representative for more details.

Uniquely positioned as "Connected Products" within EcoStruxure platform



# Selection guide

Harmony ST6 High-resolution and cost-efficient basic HMI Harmony ST6 Basic HMI panels

Applications		Display of text messages, graphic obje Control and configuration of data	ects, and synoptic views		
Type of display mod	lule	Basic HMI panels			
			Sc guider		
Display	Touchscreen size	4.3" W	7" W		
Display					
	Resolution (pixels)	480 x 272 pixels, 16 million colors	800 x 480 pixels (WVGA), 16 million colors		
	Туре	TFT Color LCD, single-touch analoge resi	istive		
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), an enclosure)	IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)		
Functions	Inctions Brightness control 16 levels (adjusted with touch panel or software)				
	Backlight service life	50,000 hrs or more (until backlight brightn	ess decreases to 25%)		
Memory	Device memory	512 MB	1 GB		
	Application memory	128 MB	128 MB		
	Backup memory	512 KB NVRAM			
Dimensions	External W × H × D mm/ <i>in.</i>	134.5 x 108.5 x 43/5.3 <i>x 4.</i> 27 <i>x</i> 1.69	208 x 153 x 45/8.19 x 6.02 x 1.77		
	Cut-out W × H mm/ <i>in</i> .	118.5 x 92.5/4.67 x 3.64	190 x 135/7.48 x 5.31		
Weight	kg/lb	0.400/0.880	0.800/1.760		
Supply voltage		24 V			
Environment		Ambient air temperature 050 °C/3212	2 °F		
Communication	Asynchronous serial link	RS-232C/485 (COM1)	RS-232C (COM1), RS-485 (COM2)		
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B			
	Buses and networks	1x Ethernet TCP/IP (10BASE-T/100BASE-TX)	2x Ethernet TCP/IP (10BASE-T/100BASE-TX)		
RTC		Yes			
Conformity to stand	lards and certifications	C€, China RoHS, REACH,KC, EN (61000- CSA C22.2 No 61010-2-201	-6-4/61000-6-2/ 61131-2), UL 61010-2-201,		
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU	)		
Development softwa	are	EcoStruxure Operator Terminal Expert (1)	)		
Terminal reference		HMIST6200, HMIST6200FW	(2) HMIST6400		
Pages		19			

For more information on EcoStruxure Operator Terminal Expert, please refer to the <u>DIA5ED2140703EN</u> catalog.
 No Logo models, without the Schneider Electric logo on front module.

lay of text messages, graphic objects, and sy trol and configuration of data	noptic views
c HMI panels	
iquir	

Basic HMI panels		
	Lagence	Sofgröder
10.1" W	12.1" W	15.6" W
1,024 x 600 pixels (SVGA), 16 million colors	1,280 x 800 pixels (WXGA), 16 million colors	1,366 x 768 pixels (FWXGA), 16 million colors
TFT Color LCD, single-touch analog resistive		
IP65F, Type 1, Type 4X (indoor use only), Type 1	3 (on the front panel when properly installed in an enclo	osure)
16 levels (adjusted with touch panel or software)		
50,000 hrs or more (until backlight brightness de	creases to 25%)	
1 GB		
128 MB		
512 KB NVRAM		
273 x 203 x 47/10.75 x 7.99 x 1.85	313 x 235 x 50/ <i>12.32 x 9.25 x 1.97</i>	412 x 268 x 50/16.22 x 10.55 x 1.97
255 x 185/10.04 x 7.28	295 x 217/11.61 x 8.54	394 x 250/15.51 x 9.84
1.300/2.870	1.800/3.970	2.700/5.950
24 V <del></del>		
Ambient air temperature 050 °C/32122 °F		
RS-232C (COM1), RS-485 (COM2)	RS-232C (COM1), RS-485 (COM2)	RS-232C (COM1), RS-485 (COM2)
1x USB 2.0 (Type A), 1x USB 2.0 Micro-B		
2x Ethernet TCP/IP (10BASE-T/100BASE-TX)		
Yes		
CE, China RoHS, REACH,KC, EN (61000-6-4/61	1000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61	010-2-201
Harmony (800 MHz ARM Cortex-A8 CPU)		
EcoStruxure Operator Terminal Expert (1)		

# Selection guide (continued)

Harmony ST6 High-resolution and cost-efficient basic HMI Harmony STW6 Basic Web HMI panels

Applications		Display of text messages, graphic ob Control and configuration of data	ects, and synoptic views	D
Type of display mod	dule	Basic Web HMI panels		В
			Figure -	
Display	Touchscreen size	4.3" W	7" W	1
	Resolution (pixels)	480 x 272 pixels, 16 million colors	800 x 480 pixels (WVGA), 16 million colors	1
	Туре	TFT Color LCD, single-touch analog res	stive	Т
Degree of protection	n	IP65F, Type 1, Type 4X (indoor use only an enclosure)	, Type 13 (on the front panel when properly installed in	IF
Functions	Brightness control	16 levels (adjusted with touch panel or s	oftware)	1
	Backlight service life	50,000 hrs or more (until backlight bright	ness decreases to 25%)	5
Memory	Device memory	512 MB		5
	User data memory	512 MB		5
	Backup memory	128 KB		1
Dimensions	External W × H × D mm/ <i>in.</i>	134.5 x 108.5 x 43/5.3 x 4.27 x 1.69	208 x 153 x 45/8.19 x 6.02 x 1.77	2
	Cut-out W × H mm/ <i>in.</i>	118.5 x 92.5/4.67 x 3.64	190 x 135/7.48 x 5.31	2
Weight	kg/lb	0.400/0.880	0.800/1.760	1
Supply voltage		24 V <del></del>		2
Environment		Ambient air temperature 050 °C/321	22 °F	A
Communication	Asynchronous serial link	-		-
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-	3	1
	Buses and networks	1x Ethernet TCP/IP	2x Ethernet with switch function for daisy chain	2
RTC		(10BASE-T/100BASE-TX) No	(10BASE-1/100BASE-1X)	Ν
Conformity to stanc	lards and certifications	C€, China RoHS, REACH,KC, EN (6100 C22.2 No 61010-2-201	0-6-4/61000-6-2/ 61131-2), UL 61010-2-201, CSA	C
Operating system		Harmony (800 MHz ARM Cortex-A8 CPI	(L	ŀ
Development softw	are	Linux Browser HTML5		L
Terminal reference		HMISTW6200	HMISTW6400	G

Basic Web HMI panels		
		Seignader
10.1" W	12.1" W	15.6" W
1,024 x 600 pixels (SVGA), 16 million colors	1,280 x 800 pixels (WXGA), 16 million colors	1,366 x 768 pixels (FWXGA), 16 million colors
TFT Color LCD, single-touch analog resistive		
IP65F, Type 1, Type 4X (indoor use only), Type	13 (on the front panel when properly installed in an enclo	osure)
16 levels (adjusted with touch panel or softward	e)	
50,000 hrs or more (until backlight brightness o	lecreases to 25%)	
512 MB		
512 MB		
128 KB		
273 x 203 x 47/10.75 x 7.99 x 1.85	313 x 235 x 50/12.32 x 9.25 x 1.97	412 x 268 x 50/16.22 x 10.55 x 1.97
255 x 185/10.04 x 7.28	295 x 217/11.61 x 8.54	394 x 250/ <i>15.51 x 9.84</i>
1.300/2.870	1.800/3.970	2.700/5.950
24 V <del></del>		
Ambient air temperature 050 °C/32122 °F		
-		RS-232C (COM1), RS-485 (COM2)
1x USB 2.0 (Type A), 1x USB 2.0 Micro-B		
2x Ethernet with switch function for daisy chain	(10BASE-T/100BASE-TX)	
No		
	61000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61	010-2-201
Harmony (800 MHz ARM Cortex-A8 CPU)		
Linux Browser HTML5		
HMISTW6500	HMISTW6600	HMISTW6700

# Selection guide (continued)

Harmony ST6 High-resolution and cost-efficient basic HMI Harmony STM6 Basic Modular HMI panels

Applications		Display of text messages, graphic objects, a Control and configuration of data	and synoptic views	Display of text message Control and configuration	es, graphic objects, and
Type of module		Basic Modular HMI Gateway Box	Edge Box HMI	Basic Modular HMI pane	
Display	Touchscreen size	-		4.3" W	
	Resolution (pixels)	-		480 x 272 pixels, 16 millio	on colors
	Туре	-		TFT Color LCD, single-tou	uch analog resistive
Degree of protection		IP20 installed on Din Rail		IP65F, Type 1, Type 4X (ir	ndoor use only), Type 1
Functions	Brightness control	-		16 levels (adjusted with to	ouch panel or software)
	Backlight service life	-		50,000 hrs or more (until b	backlight brightness dec
Memory	Device memory	1 GB		1 GB	
	Application memory	128 MB		128 MB	
	Backup memory	512 KB		512 KB	
Dimensions	External W × H × D (mm/ <i>in.)</i>	150.49 x 109.97 x 63.3/ <i>5.92 x 4.33 x 2.4</i> 9		145.60 x 108.20 x 53.90/5	5.73 x 4.25 x 2.12
	Cut-out (mm/ <i>in.)</i>	-		Hole diameter 22.5/0.88	
Weight	Display (kg/ <i>lb)</i>	-		0.220/0.490	
	Rear (kg/ <i>lb)</i>	0.456/1.005		0.270/0.600	
Supply voltage		24 V		24 V	
Environment		Ambient air temperature 060 °C/32140 °F		Ambient air temperature 0	050 °C/32122 °F
Communication	Asynchronous serial link	RS-232C/485 (COM1)		RS-232C/485 (COM1)	
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B		1x USB 2.0 (Type A), 1x U	JSB 2.0 Micro-B
	Buses and networks	2x Ethernet TCP/IP (10BASE-T/100BASE-TX)		2x Ethernet TCP/IP (10BA	ASE-T/100BASE-TX)
RTC		Yes		Yes	
Conformity to stand	ards and certifications	C€, China RoHS, REACH, KC, EN (61000-6-4/ C22.2 No 61010-2-201, ATEX Zone2/22 (1), Ma	61000-6-2/ 61131-2), UL 61010-2-201, CSA arine <i>(</i> 3)	C€, China RoHS, REACH	, KC, EN (61000-6-4/610
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)		Harmony (800 MHz ARM	Cortex-A8 CPU)
Development softwa	ire	EcoStruxure Operator Terminal Expert (2)	EcoStruxure Machine SCADA Expert (4)	EcoStruxure Operator Ter	rminal Expert (2)
Terminal reference		HMISTM6BOX	HMISTM6BOXIOT	HMISTM6200, HM	MISTM6200FW (8
Pages		19		19	

Available in Q4, 2022.
 For more information on EcoStruxure Operator Terminal Expert, please refer to the DIA5ED2140703EN catalog.
 DNV-GL, RINA, ABS.
 HMISTM6BOXIOT to EMSE catalog
 No Logo models, without the Schneider Electric logo on front module.



7" W 800 x 480 pixels (WVGA), 16 million colors anel when properly installed in an enclosure) 201.20 x 137.20 x 57.70/7.92 x 5.40 x 2.27 0.490/1.080 0-2-201, CSA C22.2 No 61010-2-201, ATEX Zone2/22 (1), Marine (3) HMISTM6400, HMISTM6400FW (5)

### Harmony ST6 High-resolution and cost-efficient basic HMI



Harmony ST6/STW6/ STM6 color touchscreen panels

#### Presentation

Harmony ST6 HMI panels provide high-quality graphics and stylish design. They are color touchscreen panels (TFT technology) available in three versions and two version with only a Box without screen:

- HMIST6 Basic: 4.3", 7", 10.1", 12.1", and 15.6" panels
   HMISTW6 Web:4.3", 7", 10.1", 12.1", and 15.6" panels
   HMISTM6 Modular: 4.3" and 7" panels, faceless Basic HMI Gateway Box □ HMISTM6 Edge Box HMI

Their efficiency, flexibility, connectivity, and security features make them suitable for use in food and beverage, HVAC&R, pumping, and packaging applications.

#### Environment

The Harmony ST6/STW6/STM6 Basic range has been designed in accordance with numerous standards, certifications, and requirements:

Compliance standards:

- □ Europe:
  - Low Voltage Directive (2014/35/EU), EMC Directive (2014/30/EU),
  - Programmable Controllers: EN 61131-2, EN 61000-6-4, EN 61000-6-2
- □ Australia: RCM
  - EN 61000-6-4
- □ Korea
  - KC
  - KN 11
  - KN 61000-6-2
- □ Russia, Belarus, Kazakhstan:
  - FAC
- Agency certifications:

□ Third-party certified standards: Underwriters Laboratories Inc., UL 61010-2-201 and CSA C22.2 No. 61010-2-201, Industrial Control Equipment

■ Operating temperature: up to 50 °C/22 °F

Degree of protection: IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)

Vibration resistance:

□ IEC/EN 61131-2 compliant, 5...9 Hz single amplitude 3.5 mm/0.14 in., 9...150 Hz fixed acceleration: 9.8 m/s<sup>2</sup>, X, Y, Z directions for 10 cycles (approximately 100 minutes)

- Shock resistance
- □ IEC/EN 61131-2 compliant, 147 m/s<sup>2</sup>, X, Y, Z directions for 3 times
- Electrical fast transient/burst
- □ IEC 61000-4-4
- □ 2 kV: Power port (display unit)
- □ 1 kV: Signal ports
- Electrostatic discharge immunity
- □ Contact discharge method: 6 kV
- □ Air discharge method: 8 kV (IEC/EN 61000-4-2 Level 3)

The modular Harmony STM6 and Harmony Edge Box HMI also certifies:

- Agency certifications:
- □ Underwriters Laboratories Inc., UL 121201 and CSA C22.2 N°213 for Industrial Control Equipment used in Class I, Division 2 Hazardous (Classified) Locations
- □ IECEx/ATEX for use in Zone 2 gas/Zone 22 dust (available in Q4, 2022)
- □ Merchant Navy, following IACS E10 (available in Q1 2021)

## Presentation (continued)

# Harmony ST6

High-resolution and cost-efficient basic HMI



EcoStruxure Operator Terminal Expert

#### Software functions

#### Harmony ST6 Basic and STM6 Modular HMI panels

The Harmony ST6 and STM6 are configured using EcoStruxure Operator Terminal Expert software. This software and its user interface bring greater ease of use to project development and online updates. EcoStruxure Operator Terminal Expert allows you to create HMI applications with an innovative navigation concept on Harmony ST6.

These panels with EcoStruxure Operator Terminal Expert offer the following functions:

■ Display of animated synoptic views with 8 types of animation (pressing the touch panel, color changes, filling, movement, rotation, size, visibility, and value display)

- Control, modification of numeric and alphanumeric values
- Display of current date and time
- Real-time and trending curves with log
- Alarm display, alarm log, and management of alarm groups
- Multi-window
- Recipe management
- Multi-language support in the Buildtime editor (10 languages)
- Storage of the application logs on USB stick
- Support of USB Barcode reader
- Web Viewer for remote visualization on PC/Tablet/Smartphone (2)

For more information on EcoStruxure Operator Terminal Expert, please refer to the <u>DIA5ED2140703EN</u> catalog.

#### Harmony STW6 Web HMI panels

Harmony STW6 uses the Web browser which acts like a Web client to display screens (1) that run Web servers on the same Intranet.

- 1 Displays the title of the Web server page or the URL when the page does not have a title
- 2 Web page area
- 3 Title bar
  - ( Moves to the previous page
  - Moves to the next page
  - Icon appears while loading the Web page instead of Refresh page icon and when clicked will stop loading the page
  - (C) Reloads the Web page and icon changes to "Stop loading"
  - ( ) Displays the Web server screen set in Server  $\rightarrow$  Start Page
  - 🗄 Touch this icon to display the sub-menu

#### Harmony Edge Box HMI

> Harmony Edge Box HMI is configured using EcoStruxure Machine SCADA Expert . This software allows to collect data with different drivers on OT devices and to push data on IT side with different Cloud drivers. In addition basic HMI features can be configured on this Box :

- Display of animated synoptic and control of numeric, alphanumeric values remotely via Web Interface.
- Scheduler Task with date & time
- Mathematic Task
- Alarm Task with log
- Trend Task with log
- Storage of the application logs in internal Flash memory, on USB sticks and on External DataBase
- Remote Visualization with Mobile Access function

For more information on  $\ensuremath{\mathsf{EMSE}}$  , please refer to the catalog  $\ensuremath{\mathsf{xxxxxx}}$ 

(1) For supported models, please contact your local Schneider Electric support representative.

(2) Web Viewer function is an option of EcoStruxure Operator Terminal Expert and will have to be purchased as a separate license for all ST6/STM6 references, except for HMISTM6BOX reference which includes the license.



## Harmony ST6 High-resolution and cost-efficient basic HMI

#### Communication

Harmony ST6 HMI panels communicate with PLCs via one or two integrated serial links, using the following communication protocols:

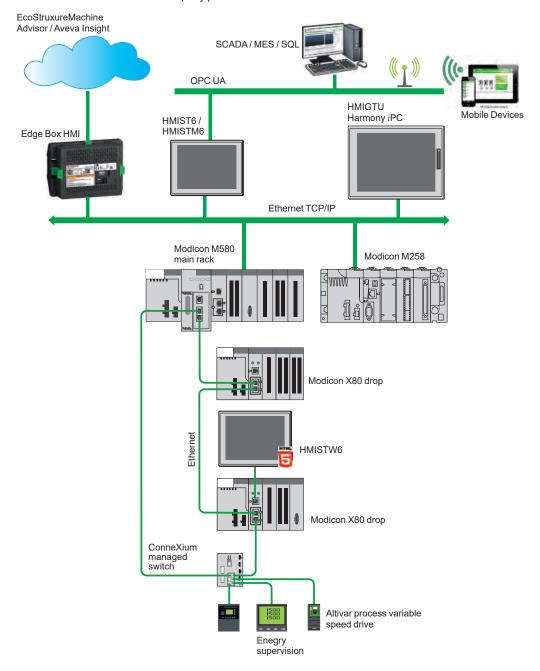
Schneider Electric (Uni-TE, Modbus)

Third-party: Mitsubishi Electric, Omron, Allen-Bradley, and Siemens

Harmony ST6 HMI Panels can also communicate on second Ethernet Network with SCADA/MES /ERP using OPC-UA protocol and with PC or Mobile devices for remote visualization using Web Viewer function.

Depending on the model, they can be connected to Ethernet TCP/IP networks using one of the following:

- A Modbus TCP protocol
- A third-party protocol

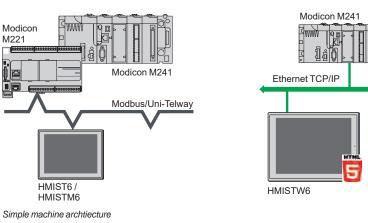


Typical plant archtiecture

### Communication (continued), **Functions**

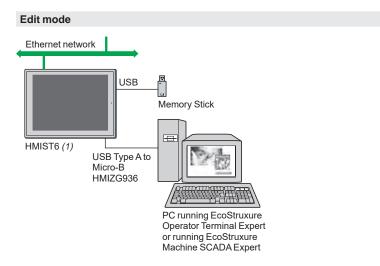
Harmony ST6 High-resolution and cost-efficient basic HMI

#### **Communication** (continued)

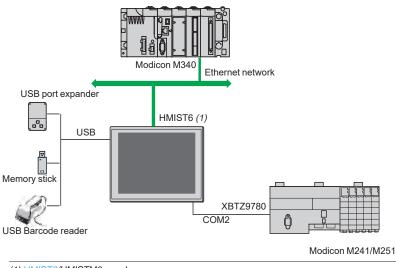


#### **Panel operating modes**

The following illustrations show the equipment that can be connected to Basic HMI panels according to their two operating modes.



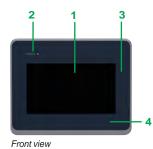
#### **Operating mode**



(1) HMIST6/HMISTM6 panels.

# Harmony ST6

High-resolution and cost-efficient basic HMI Basic/Web panels with 4" and 7" touchscreens

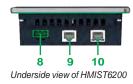




Top view of HMIST6200

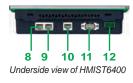


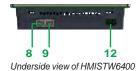
Rear view





#### Underside view of HMISTW6200





#### Description

#### Harmony HMIST6 200/400 Basic and HMISTW6 200/400 Web HMI panels Front view

- 1 Single-touch resistive screen for displaying synoptic views
- 2 Multi-color status indicator (green, orange, and red) showing the panel's operating mode
- 3 Aluminum alloy front panel providing IP65F protection when mounted on panel or enclosure door
- 4 Without the Schneider Electric logo on the front module for the HMIST6200FW Basic HMI panels

#### Top view

- 5 Battery slot (1)
- 6 Hook to hold panel in position during installation

#### **Rear view**

- 7 USB (Type A) interface
- 8 USB (Micro-B) interface

#### Harmony HMIST6200 Basic and HMISTW6200 Web HMI panels Underside view

- 9 Ethernet interface (ETH1)
- 10 Serial interface (RJ45, RS-232C/485) (COM1)
- 11 Power plug connector

# Harmony HMIST6400 Basic and HMISTW6400 Web HMI panels Underside view

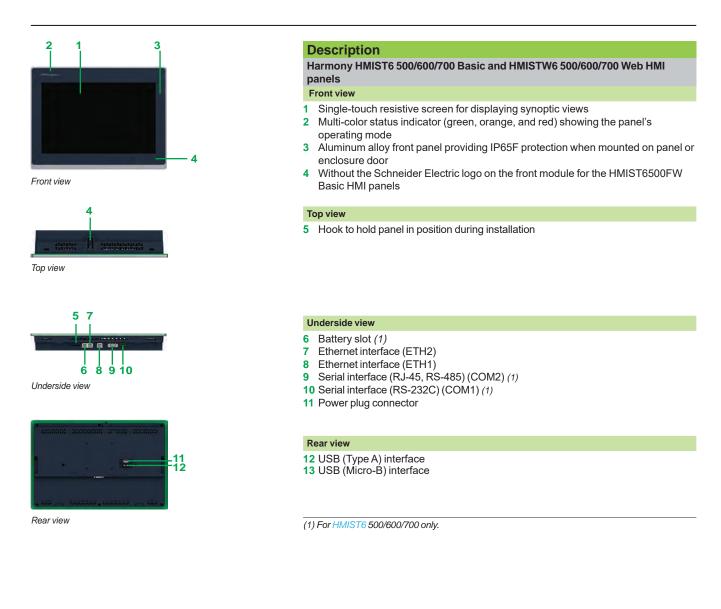
- 8 Ethernet interface (ETH2)
- 9 Ethernet interface (ETH1)
- 10 Serial interface (RJ-45, RS-485) (COM2)
- 11 Serial interface (RS-232C) (COM1)
- 12 Power plug connector

(1) For HMIST6 200/400 only.

# Description (continued)

# Harmony ST6

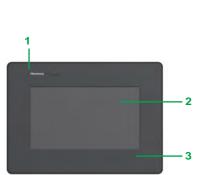
High-resolution and cost-efficient basic HMI Basic/Web panels with 10", 12", and 15" touchscreens



### Description (continued)

# Harmony ST6

High-resolution and cost-efficient basic HMI Modular panels with 4" and 7" display modules and rear module, Gateway box and Edge Box HMI



Front view of HMISTM62



Front view of HMISTM6B



Underside view of HMISTM6B



Side view of Modular panel



HMISTM6BOX mounted on DIN rail

#### Description

The modular Harmony STM6 version has:

- Basic HMI Modular panels HMISTM6200 and HMISTM6400, a combination of display module 4" (HMISTM6200) or 7" (HMISTM6400) and a rear module (HMISTM6B)
- Basic HMI Gateway Box, rear module (HMISTM6BOX) mounted on DIN Rail adapter.

■ The Edge Box HMI ( HMISTM6BOXIOT) is a Box without screen and mounted on DIN rail.

#### **Display module**

#### Front view

- 1 Multi-color status LED
- Single-touch resistive screen for displaying synoptic views
   Without the Schneider Electric logo on the front module for the
  - Without the Schneider Electric logo on the front module for the HMISTM6 200FW/400FW Basic Modular HMI panels

#### Rear module

- Front view
- 4 Status LED
- 5 Bumper
- 6 USB (Type A) interface
- 7 USB (micro-B) interface

#### Underside view

- 8 Power plug connector
- 9 Serial interface (COM1)
- 10 Ethernet interface (ETH1)
- 11 Ethernet interface (ETH2)

Modular panel: Display module + Rear module

12 Button to seperate the rear module from display module

#### HMISTM6 Gateway Box

13 DIN rail mount

#### HMISTM6 Edge Box HMI

Same external design than HMISTM6 Gateway Box with same communication interfaces and same power supply.

12 DIN rail mount

#### Schneider Electric

HMISTM6BOX

Harmony ST6 High-resolution and cost-efficient basic HMI Basic/Web/Modular HMI panels

	Harmony								
	Data entry method	Size	Resolution (pixels)	Colors	Device memory	Applicatior memory	Number of ports	Reference	Weight kg/ <i>lb</i>
	Via touchscreen	4.3" W	480 x 272	16 million colors	512 MB	128 MB	2x USB 1x COM 1 1x Ethernet	HMIST6200 HMIST6200FW	0.400/ <i>0.88</i>
HMIST6400		7" W	800 × 480 WVGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6400	0.800/1.76
		10.1" W	1,024 x 600 WSVGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6500 HMIST6500FW	1.300/2.87
IMIST6700		12.1" W	1,280 × 800 WXGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6600	1.800/3.97
		15.6" W	1,366 x 768 FWXGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6700	2.700/5.95
HMISTW6400	Harmony	STW6 V	Veb HMI p	anels					
	Data entry method	Size	Resolution (pixels)		Device memory	User data memory	Number of ports	Reference	Weight kg/ <i>lb</i>
	Via touchscreen	4.3" W	480 x 272	16 million colors	512 MB	512 MB	2x USB 1x Ethernet	HMISTW6200	0.400/ <i>0.88</i>
		7" W	800 × 480 WVGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6400	0.800/1.76
HMISTW6700		10.1" W	1,024 x 600 WSVGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6500	1.300/2.87
-		12.1" W	1,280 × 800 WXGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6600	1.800/3.97
IMISTM6200		15.6" W	1,366 x 768 FWXGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6700	2.700/5.95
	Harmony	STM6 N	lodular Hl	MI pane	ls				
	Data entry method	Size	Resolution (pixels)		Device memory	Application memory	Number of ports	Reference	Weight kg/ <i>lb</i>
Hereit	Via touchscreen	4.3" W	480 x 272	16 million colors	1 GB	128 MB	2x USB 2x Ethernet 1x COM1	HMISTM6200 HMISTM6200FW	0.490/ <i>1.080</i>
synter		7" W	800 × 480 WVGA	16 million colors	1 GB	128 MB	2x USB 2x Ethernet 1x COM1	HMISTM6400 HMISTM6400FW	0.760/1.67
HMISTM6400	-	_	-	_	1 GB	128 MB	2x USB 2x Ethernet 1x COM1	HMISTM6BOX	0.456/1.00
	Harmony	Edae B	ox HMI						
	Data entry	Size	Resolution (pixels)	Colors	Device memory	Applicatior memory	Number of ports	Reference	Weight kg/ <i>lb</i>
	-	-	-	-	1 GB	128 MB	2x USB 2x Ethernet	HMISTM6BOXIOT	0.456/1.005

Schneider Gelectric

2x Ethernet 1x COM1

## References (continued)

Harmony ST6 High-resolution and cost-efficient basic HMI Accessories

		• · · · · · · · · · · · · · · · · · · ·		
Description	Characteristics	Compatible with panels	Reference	Weight kg/ <i>lb</i>
RJ45 to D-Sub 25 pin conversion cable	Connects a D-Sub 25-pin cable to this product (RJ45)	HMISTM6200/HMISTM6400	XBTZG939	-
9-pin-to-25-pin RS-232C conversion cable	Connects a standard RS-232C cable (D-Sub 25-pin socket) to this product (D-sub 9 pin plug)	HMISTM6200/HMISTM6400	XBTZG919	_
COM Port conversion adapter	Connects optional RS-422 communication items to serial interface (RS-232C)	HMISTM6200/HMISTM6400	XBTZGCOM1	_
RS-485 isolation unit	Connects a host controller to this product with isolation	HMISTM6200/HMISTM6400	XBTZGI485	_



HMIZSUSBB2





XBTZ3002

Accessories				
Description	Characteristics	Compatible with panels	Reference	Weight kg/ <i>lb</i>
USB panel-mount extension cable	Extension cable of 1 m/3.28 ft for connecting USB interface to front panel	-	HMIZSUSBB2	_
USB front cable	Extension cable that attaches USB interface to front panel	_	XBTZGUSB	-
USB Type A clamp (1 port)	Clamp to prevent disconnection of USB cable (USB Type A, 1 port), 5 clamps/se		HMIZGCLP1	_

Separate parts									
Description	Characteristics	Compatible with panels	Reference	Weight kg/ <i>lb</i>					
Screen protection sheet with UV	Disposable, dirt-resistant and ultra-violet protection sheet (1 sheet/set)	HMIST6200/HMISTW6200/ HMISTM6200	HMIZG60W	-					
protected		HMIST6400/HMISTW6400/ HMISTM6400	HMIZG63W	-					
		HMIST6500/HMISTW6500	HMIZG65W1	_					
		HMIST6700/HMISTW6700	HMIZG67W	-					
	Disposable, dirt resistant sheet (5 sheets/set)	HMIST6600/HMISTW6600	HMIZD66W	-					
Spring clip	Fasteners to attach this product to the mounting surface	HMIST6200/HMISTW6200	XBTZ3002						

## References (continued)

Harmony ST6 High-resolution and cost-efficient basic HMI Accessories



HMISTM6B



HMISTM64



HMIZSFIXTF1



HMIZS53W1



HMIZM6DSA



Description	Characteristics	Compatible with panels	Reference	Weight
Description	onaracteristics		Kelerence	kg/ <i>lk</i>
Rear module	rear module for Harmony STM6	HMISTM6200/HMISTM6400	HMISTM6B	
Display module	display module for HMISTM6200, 4-inch wide type	HMISTM6400	HMISTM62	
Display module	display module for HMISTM6400, 7-inch wide type	HMISTM6400	HMISTM64	
Display module fixing nut	nut to install the display module (10 pieces/set)	HMISTM6200/HMISTM6400	ZB5AZ901	
Socket wrench	socket wrench to tighten and loosen the display installation nut	HMISTM6200/HMISTM6400	ZB5AZ905	
Accessories kit	anti-rotation Tee, USB Clamp Type A, USB Clamp mini-B <i>(</i> 2) (1 piece/each)	HMISTM6200/HMISTM6400	HMIZM6KIT	
Installation fastener	Installation fastener	HMIST6200/HMISTW6200	HMIZSFIX2	
astener		HMIST6400/HMISTW6400	HMIZSFIXTF1 (1)	
		HMIST6500/HMISTW6500		
		HMIST6600/HMISTW6600		
		HMIST6700/HMISTW6700		
Installation gasket	Provides dust and moisture resistance when this product is installed in a solid	HMIST6200/HMISTW6200	HMIZS51W1	
	panel	HMISTM6200	HMIZS51W2	
		HMIST6400/HMISTW6400	HMIZS53W1	
		HMISTM6400	HMIZS53W2	
		HMIST6500/HMISTW6500	HMIZS55W1	
		HMIST6600/HMISTW6600	HMIZS56W1	
		HMIST6700/HMISTW6700	HMIZS57W1	
DC power supply connector	Connector to connect DC power supply cables	All panels	XBTZGPWS1	
Replacement battery	Primary battery for time data backup	HMIST6 panels	HMIZSBA1	

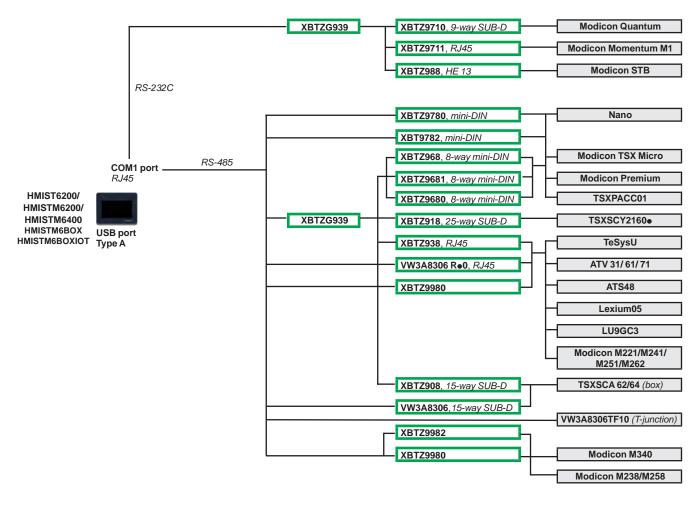
Separate parts					
Description	Characteristics	Compatible with panels	Reference	Weight kg/ <i>lb</i>	
Rear module installation adapter	Adapter for installing the rear module on a DIN rail	HMISTM6200/HMISTM6400	HMIZM6DSA	_	
Spacer	Plate for adjusting installation panel thickness for the 4-inch wide display module	HMISTM6200	HMIZM6MP2	_	
Spacer	Plate for adjusting installation panel thickness for the 7-inch wide display module	HMISTM6400	HMIZM6MP4		
Display module/ Rear module separation cable (3 m/9.84 ft)	cable for use when installing the rear module and display module apart from the other	HMISTM6200/HMISTM6400	HMIZM6RDP3		
Display module/ Rear module separation cable (5 m/16.40 ft)	cable for use when installing the rear module and display module apart from the other	HMISTM6200/HMISTM6400	HMIZM6RDP5		
Display module/ rear module separation cable (10 m/32.80 ft)	cable for use when installing the rear module and display module apart from the other	HMISTM6200/HMISTM6400	HMIZM6RDP10		

(1) 2 pieces/set for HMI6400/HMI6500/HMI6600 and 3 pieces/set for HMIST6700.
(2) USB Clamp mini-B can be used for optional USB micro-B cables.



Harmony ST6 High-resolution and cost-efficient basic HMI Connection system

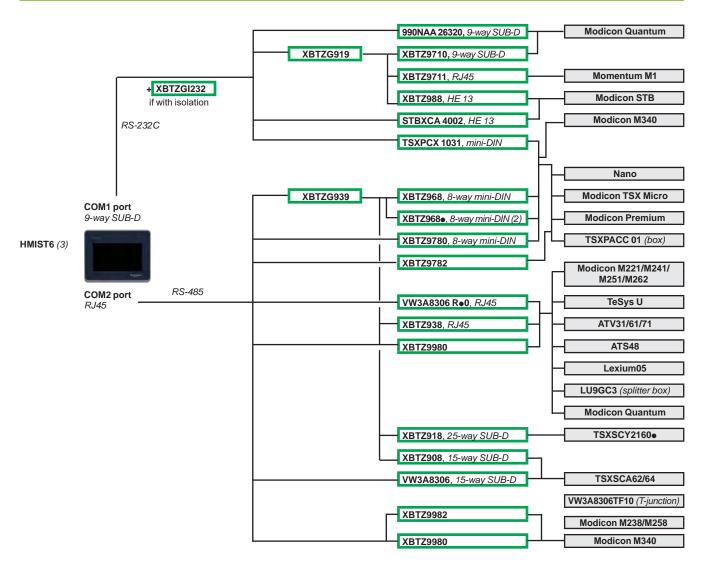
#### **HMIST6** panels and Schneider Electric products



# Harmony ST6

High-resolution and cost-efficient basic HMI **Connection system** 

#### **HMIST6** panels and Schneider Electric products



(1) RS-485 not available for HMIST6 (COM1).

(2) • defines the length:

- 0: 2.5 m/8.2 ft (elbowed connector)

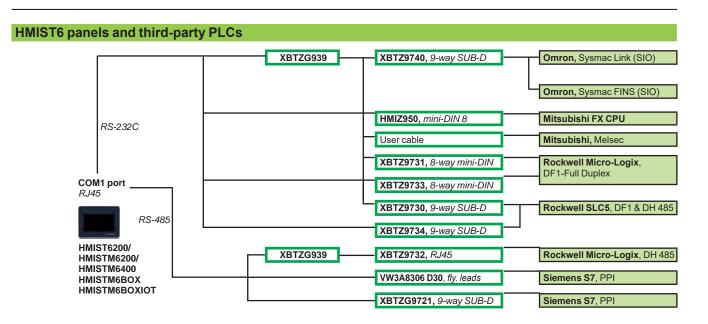
- **1**: 5 m/16.4 ft

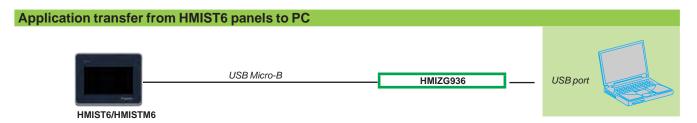
- 6: 16 m/52.5 ft - 7: 20 m/65.6 ft

- 8: 25 m/82 ft

(3) Except HMIST6200.

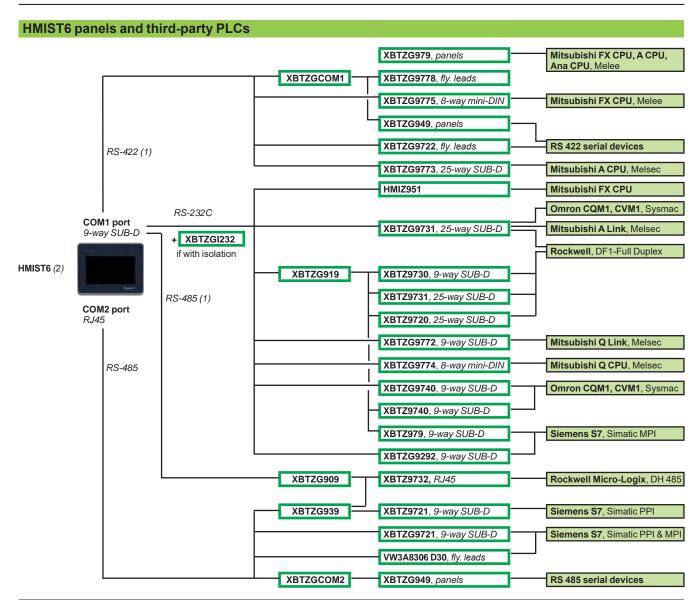
### Harmony ST6 High-resolution and cost-efficient basic HMI Connection system





# Harmony ST6

High-resolution and cost-efficient basic HMI Connection system



(1) RS-422 and RS-425 not available on HMIST6 (COM1). (2) Except HMIST6200. Index

Harmony ST6 High-resolution and cost-efficient basic HMI Product reference index

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DIA5ED2181202EN May 2022- V6.0