



Harmony ST6

High-resolution and cost-efficient
basic HMI



Harmony

Discover Harmony

Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. **Harmony** includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions.

Explore our offer

- [Harmony Push Buttons and Switches](#)
- [Harmony HMI Operator Terminals, IPC and EdgeBox](#)
- [Harmony Signaling Devices](#)
- [Harmony Electrical Relays](#)
- [Harmony Safety](#)

Life Is On

Schneider
Electric

Quick access to product information

Get technical information about your product

References

Modicon TM3
I/O expansion modules for Modicon controllers
Analog I/O modules

Number and type of channels	Input range	Resolution	Aperture time (typical)	Reference	Weight (kg)
2 voltage/current inputs	-15...+10 VDC 0...20 mA A, 20 mA	16,000 or 10,000 1/2	0.005 s 0.005 s	TM3AI2H TM3AI2HG	0.110 0.100
4 voltage/current inputs	-15...+10 VDC 0...20 mA A, 20 mA	12,000 or 10,000 1/2	0.005 s 0.005 s	TM3AI4 TM3AI4G	0.100 0.100
4 voltage/current or temperature inputs (T)	-15...+10 VDC 0...20 mA A, 20 mA	16,000 or 10,000 1/2	0.005 s 0.005 s	TM3AI4T TM3AI4TG	0.110 0.100
4 differential temperature inputs (T)	0...100 °C 0...100 °C	16,000 or 10,000 1/2	0.005 s 0.005 s	TM3AI4T TM3AI4TG	0.110 0.100
8 self-supply	-15...+10 VDC	12,000 or 10,000 1/2	0.005 s 0.005 s	TM3AI8 TM3AI8G	0.110 0.110

Share Price Global (English) My Products My Documents Partner Portal

Life Is On Schneider Electric

Search products, documents & more

PRODUCTS SOLUTIONS SERVICES SUPPORT ABOUT US

All products Industrial Automation and Control PLC, PAC and Dedicated Controllers Distributed Input/Output (I/O) Modules Modicon TM3

View all Modicon TM3

TM3AI2H

Module TM3 - 2 analog inputs high resolution

Show more characteristics >

Related Software >

Add to My Products Compare

Product Datasheet User guide Catalogue CAD Document

Characteristics Documents and Downloads Technical FAQs Additional Information Dimensions Drawings >

Main

range of product Modicon TM3

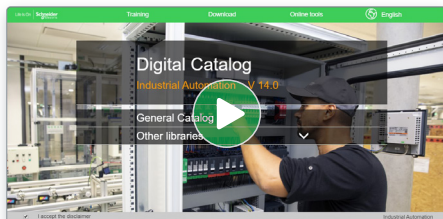
product or component type Analog input module

range compatibility Modicon M251

Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

Find your catalog



- > With just 3 clicks, you can access the Industrial Automation and Control catalogs, in both English and French
- > Consult digital automation catalogs at [Digi-Cat Online](#)

Industrial Automation

General Catalog

Publications, Datasheets, PLC Lights & Displays

Hardware 200

Product Selector

Images

Publications, Datasheets, PLC Lights & Displays

Hardware 200

Product Selector

Images

- Up-to-date catalogs
- Embedded product selectors, 360° pictures
- Optimized search by commercial references

Select your training



- > Find the right [Training](#) for your needs on our Global website
- > Locate the training center with the selector tool, using this [link](#)

Training and courses

Training by domain of expertise

Electrical Installation and Safety

Data Center

Industrial Automation

General contents

Harmony ST6 basic HMI panels

■ General presentation

- Refined hardware design [page 2](#)
- Visualization [page 2](#)
- Easy to install [page 3](#)
- Easy to use [page 3](#)
- Connected and secure [page 3](#)

Selection guide [page 4](#)

■ Presentation

- Environment [page 10](#)
- Software functions [page 11](#)
- Communication [page 12](#)

■ Functions

- Panel operating modes
 - Edit mode [page 13](#)
 - Operating mode [page 13](#)

■ Description

- Panels with 4" and 7" touchscreens [page 14](#)
- Panels with 10", 12", and 15" touchscreens [page 15](#)
- Modular panels with 4" and 7" display modules and rear module [page 16](#)

■ References

- Basic/Web/Modular HMI panels [page 17](#)
- Accessories [page 18](#)
- Separate parts [page 18](#)
- Spare parts [page 19](#)

■ **Connection system** [page 20](#)

■ **Product reference index** [page 24](#)

Harmony ST6

High-resolution and cost-efficient basic HMI
Refined hardware design with improved visualization

Harmony ST6 Basic, web, and modular HMI panels

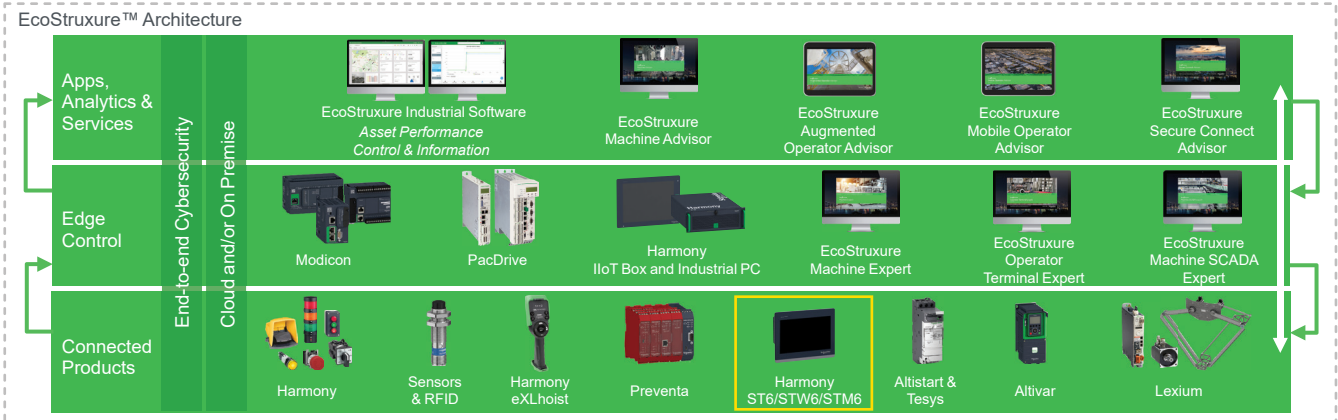


Harmony ST6

Harmony ST6 HMI panels range in size from 4" to 15" and combine exceptional quality with good graphics and stylish design. The ST6 and STM6 offers an improved user operation experience through an intuitive design powered by EcoStruxure Operator Terminal Expert software. The Harmony ST6 Web version has a pre-installed browser that provides a ready-to-use agnostic terminal that allows all devices to be visualized within an HTML5 server. The Harmony STM6 Modular version comes with a unique 22 mm pushbutton mounting system.

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 ranges 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



Visualization

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



- > Theme and color set for supporting situational awareness



Day mode



Custom mode



Night mode



Alarm mode

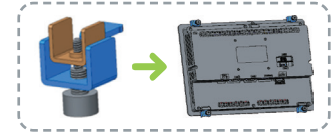
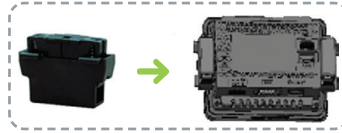
+ Attractive aesthetics and visualization for simple machines

Harmony ST6

High-resolution and cost-efficient basic HMI
Easy to install and use, connected and secure

Easy to install

- Quick mounting without screwdriver for ST6/STW6 panels:
 - Spring clip for 4" panel (1)
 - Tool-free fastener for 7", 10", 12", and 15" panels



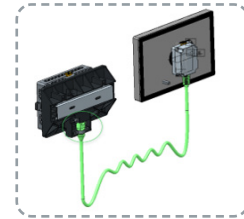
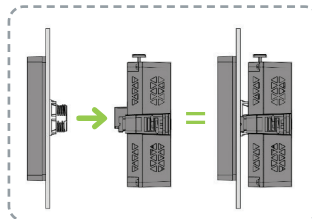
- Electronic manual via QR code for easy in-field maintenance without PC or paper for all ST6 panels



- 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



Multi-screen function

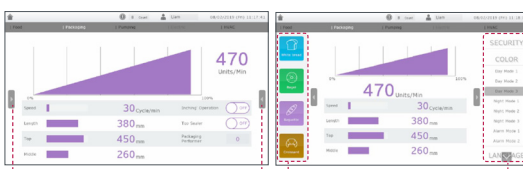
Easy to use

Harmony ST6/STM6 basic HMI

- With the Multi Screen function, more information can be displayed in a single screen
- With the Layout Objects (Dock Panel) function:
 - Several pages can be embedded in one screen and users can navigate in each section independently
 - Screens are automatically resized to fit the frame
 - Frame sizes can be dynamically changed to show different content

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 (2)



Click this tab

See more hidden information

Layout objects



Harmony STW6



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 HMIST6 and HMISTM6)

(1) This accessory has to be ordered separately.

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

Harmony ST6

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

Applications		Display of text messages, graphic objects, and synoptic views Control and configuration of data	
Type of display module		Basic HMI panels	
			
Display	Touchscreen size	4.3" W	7" W
	Resolution (pixels)	480 x 272 pixels, 16 million colors	800 x 480 pixels (WVGA), 16 million colors
	Type	TFT Color LCD, single-touch analogue resistive	
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)	
Functions	Brightness control	16 levels (adjusted with touch panel or software)	
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)	
Memory	Device memory	512 MB	1 GB
	User data memory	128 MB	128 MB
	Backup memory	512 KB NVRAM	
Dimensions	External W × H × D mm/in.	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
	Cut-out W × H mm/in.	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 $\overline{\text{---}}$	
Environment		Ambient air temperature 0...50 °C/32...122 °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 standards and certifications		CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201	
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)	
Development software		EcoStruxure Operator Terminal Expert (1)	
Terminal reference		HMIST6200	HMIST6400
Pages		17	

(1) For more information on EcoStruxure Operator Terminal Expert, please refer to the [DIA5ED2140703EN](#) catalog.

Applications			Display of text messages, graphic objects, and synoptic views Control and configuration of data
Type of display module			Basic HMI panels
			
			
			
Display	Touchscreen size	10.1" W	12.1" W
	Resolution (pixels)	1,024 x 600 pixels (SVGA), 16 million colors	1,280 x 800 pixels (WXGA), 16 million colors
	Type	TFT Color LCD, single-touch analog resistive	
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)	
Functions	Brightness control	16 levels (adjusted with touch panel or software)	
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)	
Memory	Device memory	1 GB	
	User data memory	128 MB	
	Backup memory	512 KB NVRAM	
Dimensions	External W × H × D mm/in.	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
	Cut-out W × H mm/in.	255 x 185/10.04 x 7.28	295 x 217/11.61 x 8.54
Weight	kg/lb	1.300/2.870	1.800/3.970
Supply voltage		24 V $\overline{\text{---}}$	
Environment		Ambient air temperature 0...50 °C/32...122 °F	
Communication	Asynchronous serial link	RS-232C (COM1), RS-485 (COM2)	RS-232C (COM1), RS-485 (COM2)
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B	
	Buses and networks	2x Ethernet TCP/IP (10BASE-T/100BASE-TX)	
RTC		Yes	
Conformity to standards and certifications		CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201	
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)	
Development software		EcoStruxure Operator Terminal Expert (1)	
Terminal reference		HMIST6500	HMIST6600
Pages		17	

(1) For more information on EcoStruxure Operator Terminal Expert, please refer to the [DIA5ED2140703EN](#) catalog.

Harmony ST6

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

Applications		Display of text messages, graphic objects, and synoptic views Control and configuration of data	
Type of display module		Basic Web HMI panels	
			
Display	Touchscreen size	4.3" W	7" W
	Resolution (pixels)	480 x 272 pixels, 16 million colors	800 x 480 pixels (WVGA), 16 million colors
	Type	TFT Color LCD, single-touch analog resistive	
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)	
Functions	Brightness control	16 levels (adjusted with touch panel or software)	
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)	
Memory	Device memory	512 MB	
	User data memory	512 MB	
	Backup memory	128 KB	
Dimensions	External W × H × D mm/in.	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
	Cut-out W × H mm/in.	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 $\overline{\text{---}}$	
Environment		Ambient air temperature 0...50 °C/32...122 °F	
Communication	Asynchronous serial link	–	
	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 with switch function for daisy chain (10BASE-T/100BASE-TX)
RTC		No	
Conformity to standards and certifications		CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201	
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)	
Development software		Linux Browser HTML5	
Terminal reference		HMISTW6200	HMISTW6400
Pages		17	

Applications			Display of text messages, graphic objects, and synoptic views Control and configuration of data
Type of display module			Basic Web HMI panels
			
Display	Touchscreen size	10.1" W	12.1" W
	Resolution (pixels)	1,024 x 600 pixels (SVGA), 16 million colors	1,280 x 800 pixels (WXGA), 16 million colors
	Type	TFT Color LCD, single-touch analog resistive	
Degree of protection			IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure)
Functions	Brightness control	16 levels (adjusted with touch panel or software)	
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)	
Memory	Device memory	512 MB	
	User data memory	512 MB	
	Backup memory	128 KB	
Dimensions	External W × H × D mm/in.	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
	Cut-out W × H mm/in.	255 x 185/10.04 x 7.28	295 x 217/11.61 x 8.54
Weight	kg/lb	1.300/2.870	1.800/3.970
Supply voltage			24 V $\overline{\text{---}}$
Environment			Ambient air temperature 0...50 °C/32...122 °F
Communication	Asynchronous serial link	–	
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B	
	Buses and networks	2x Ethernet with switch function for daisy chain (10BASE-T/100BASE-TX)	
RTC			No
Conformity to standards and certifications			CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/ 61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201
Operating system			Harmony (800 MHz ARM Cortex-A8 CPU)
Development software			Linux Browser HTML5
Terminal reference			HMISTW6500
Pages			17

Harmony ST6

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

Applications	Display of text messages, graphic objects, and synoptic views Control and configuration of data
Type of display module	Basic Modular HMI panels



Display	Touchscreen size	4.3" W
	Resolution (pixels)	480 x 272 pixels, 16 million colors
	Type	TFT Color LCD, single-touch analog resistive
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), Type 12 and Type 13 (on the front panel when properly installed in an enclosure)
Functions	Brightness control	16 levels (adjusted with touch panel or software)
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)
Memory	Device memory	1 GB
	User data memory	128 MB
	Backup memory	512 KB
Dimensions	External W x H x D (mm/in.)	145.60 x 108.20 x 53.90/5.73 x 4.25 x 2.12
	Cut-out (mm/in.)	Hole diameter 22.5/0.88
Weight	Display (kg/lb)	0.220/0.490
	Rear (kg/lb)	0.270/0.600
Supply voltage		24 V $\overline{=}$
Environment		Ambient air temperature 0...50 °C/32...122 °F
Communication	Asynchronous serial link	RS-232C/485 (COM1)
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B
	Buses and networks	2x Ethernet TCP/IP (10BASE-T/100BASE-TX)
RTC		Yes
Conformity to standards and certifications		CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201, ATEX Zone2/22 (1), Marine (2)
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)
Development software		EcoStruxure Operator Terminal Expert (3)
Terminal reference		HMISTM6200
Pages		17

(1) Available in Q4 2020.
(2) Available in Q1 2021.
(3) For more information on EcoStruxure Operator Terminal Expert, please refer to the DIA5ED2140703EN catalog.

Applications	Display of text messages, graphic objects, and synoptic views Control and configuration of data
Type of display module	Basic Modular HMI panels



Display	Touchscreen size	7" W
	Resolution (pixels)	800 x 480 pixels (WVGA), 16 million colors
	Type	TFT Color LCD, single-touch analog resistive
Degree of protection		IP65F, Type 1, Type 4X (indoor use only), Type 12 and Type 13 (on the front panel when properly installed in an enclosure)
Functions	Brightness control	16 levels (adjusted with touch panel or software)
	Backlight service life	50,000 hrs or more (until backlight brightness decreases to 25%)
Memory	Device memory	1 GB
	User data memory	128 MB
	Backup memory	512 KB
Dimensions	External W x H x D (mm/in.)	201.20 x 137.20 x 57.70/7.92 x 5.40 x 2.27
	Cut-out (mm/in.)	Hole diameter 22.5/0.88
Weight	Display (kg/lb)	0.490/1.080
	Rear (kg/lb)	0.270/0.600
Supply voltage		24 V $\overline{=}$
Environment		Ambient air temperature 0...50 °C/32...122 °F
Communication	Asynchronous serial link	RS-232C/485 (COM1)
	USB ports	1x USB 2.0 (Type A), 1x USB 2.0 Micro-B
	Buses and networks	2x Ethernet TCP/IP (10BASE-T/100BASE-TX)
RTC		Yes
Conformity to standards and certifications		CE, China RoHS, REACH, KC, EN (61000-6-4/61000-6-2/61131-2), UL 61010-2-201, CSA C22.2 No 61010-2-201, ATEX Zone2/22 (1), Marine (2)
Operating system		Harmony (800 MHz ARM Cortex-A8 CPU)
Development software		EcoStruxure Operator Terminal Expert (3)
Terminal reference		HMISTM6400
Pages		17

(1) Available in Q4 2020.
(2) Available in Q1 2021.
(3) For more information on EcoStruxure Operator Terminal Expert, please refer to the DIA5ED2140703EN catalog.

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:

- HMIST6 Basic: 4.3", 7", 10.1", 12.1", 15.6"
- HMISTW6 Web: 4.3", 7", 10.1", 12.1", 15.6"
- HMISTM6 Modular: 4.3", 7"

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:
 - EAC
- 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/s², X, Y, Z directions for 10 cycles (approximately 100 minutes)
- Shock resistance
 - IEC/EN 61131-2 compliant, 147 m/s², 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 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 Q1 2021)
 - Merchant Navy, following IACS E10 (available in Q1 2021)



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.

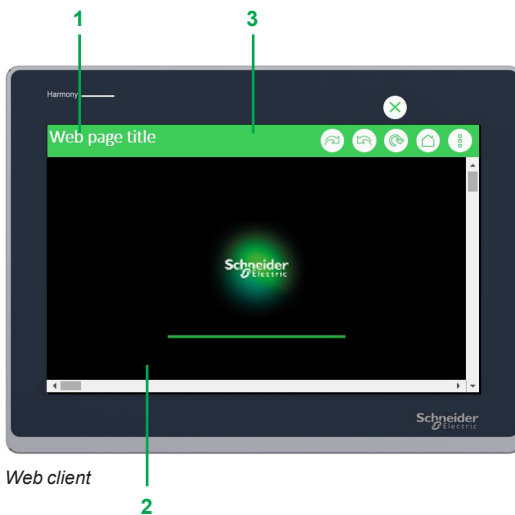
These panels with EcoStruxure Operator Terminal Expert offer the following functions:

- 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

For more information on EcoStruxure Operator Terminal Expert, please refer to the [DIA5ED2140703EN](#) 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.



Web client

- 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
 - Reloads the Web page and icon changes to "Stop loading"
 - Displays the Web server screen set in Server → Start Page
 - Touch this icon to display the sub-menu

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

Harmony ST6

High-resolution and cost-efficient basic HMI

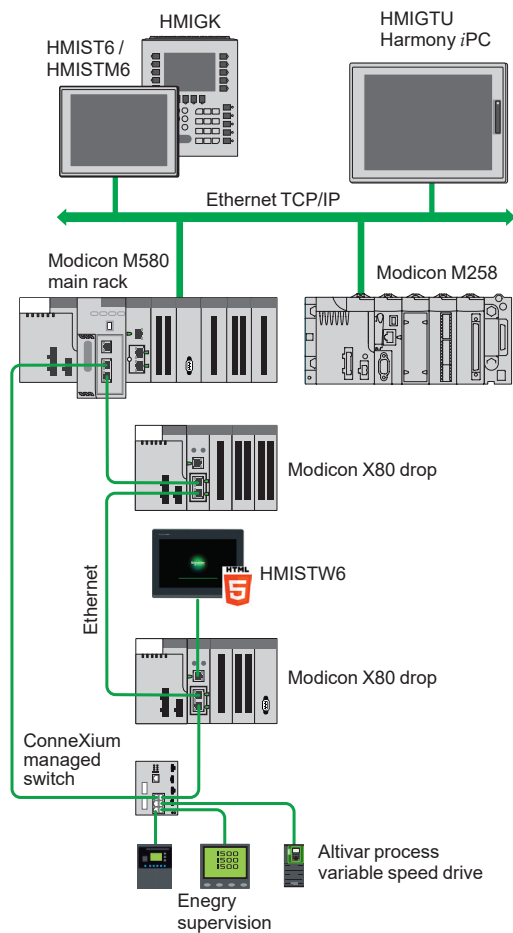
Communication

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

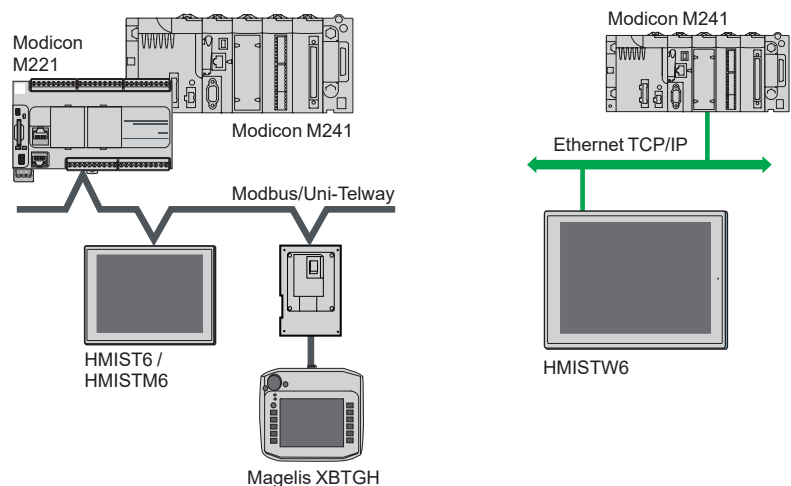
- Schneider Electric (Uni-TE, Modbus)
- Third-party: Mitsubishi Electric, Omron, Allen-Bradley, and Siemens

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

- A Modbus TCP protocol
- An Ethernet TCP/IP protocol
- A third-party protocol



Typical plant architecture

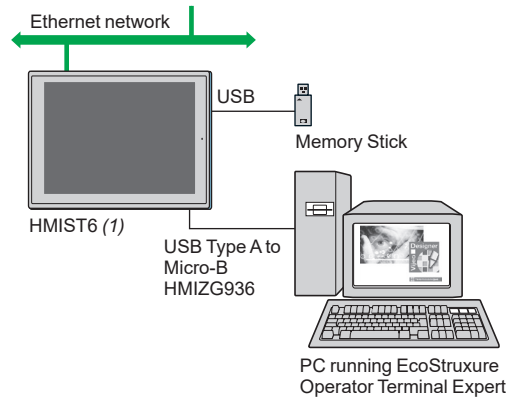


Simple machine architecture

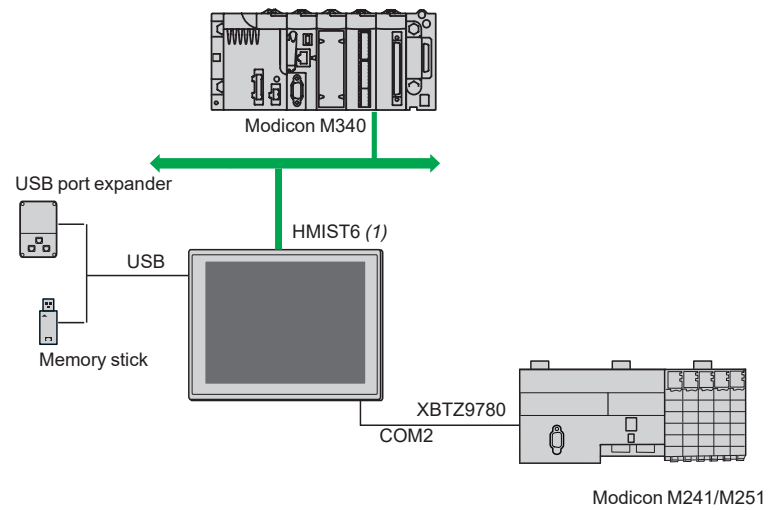
Panel operating modes

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

Edit mode



Operating mode

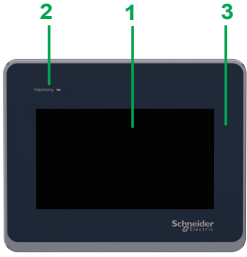


(1) HMIST6/HMISTM6 panels.

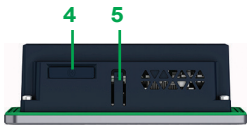
Description

Harmony ST6

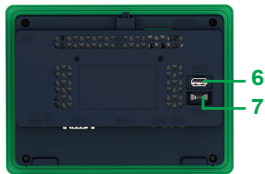
High-resolution and cost-efficient basic HMI
Basic/Web panels with 4" and 7" touchscreens



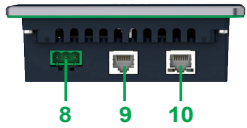
Front view



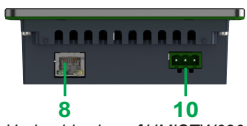
Top view of HMIST6200



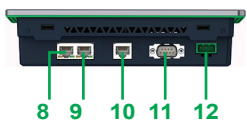
Rear view



Underside view of HMIST6200



Underside view of HMISTW6200



Underside view of HMIST6400



Underside view of HMISTW6400

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

Top view

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

Rear view

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

Harmony HMIST6200 Basic and HMISTW6200 Web HMI panels

Underside view

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

Harmony HMIST6400 Basic and HMISTW6400 Web HMI panels

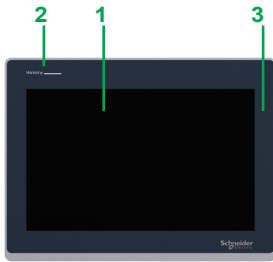
Underside view

- 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

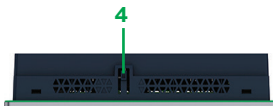
(1) For HMIST6 200/400 only.

Harmony ST6

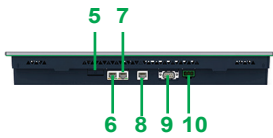
High-resolution and cost-efficient basic HMI
Basic/Web panels with 10", 12", and 15" touchscreens



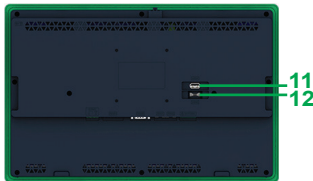
Front view



Top view



Underside view



Rear view

Description

Harmony HMIST6 500/600/700 Basic and HMISTW6 500/600/700 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

Top view

- 4 Hook to hold panel in position during installation

Underside view

- 5 Battery slot (1)
- 6 Ethernet interface (ETH2)
- 7 Ethernet interface (ETH1)
- 8 Serial interface (RJ-45, RS-485) (COM2) (1)
- 9 Serial interface (RS-232C) (COM1) (1)
- 10 Power plug connector

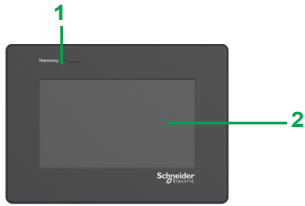
Rear view

- 11 USB (Type A) interface
- 12 USB (Micro-B) interface

(1) For HMIST6 500/600/700 only.

Harmony ST6

High-resolution and cost-efficient basic HMI
Modular panels with 4" and 7" display modules and
rear module



Front view of HMISTM62



Front view of HMISTM6B



Underside view of HMISTM6B



Side view of Modular panel

Description

Display module

Front view

- 1 Multi-color status LED
- 2 Single-touch resistive screen for displaying synoptic views

Rear module

Front view

- 3 Status LED
- 4 Bumper
- 5 USB (Type A) interface
- 6 USB (micro-B) interface

Underside view

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

Side view of Modular panel

- 11 Button to separate the rear module from display module

Harmony ST6

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

ST6_65770_CPMS16002R



HMIST6400

ST6_65770_CPMS16005R



HMIST6700

ST6_65770_CPMS16002R



HMISTW6400

TO_65770_CPMS16005R



HMISTW6700

STM6_CP20077



HMISTM6200

STM6_CP20080



HMISTM6400

Harmony ST6 Basic HMI panels								
Data entry method	Size	Resolution (pixels)	Colors	Device memory	User data memory	Number of ports	Reference	Weight kg/lb
Via touchscreen	4.3" W	480 x 272	16 million colors	512 MB	128 MB	2x USB 1x COM 1 1x Ethernet	HMIST6200	0.400/0.880
	7" W	800 x 480 WVGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6400	0.800/1.760
	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	1.300/2.870
	12.1" W	1,280 x 800 WXGA	16 million colors	1 GB	128 MB	2x USB 1x COM 1 1x COM 2 2x Ethernet	HMIST6600	1.800/3.970
	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	2.700/5.950

Harmony STW6 Web HMI panels								
Data entry method	Size	Resolution (pixels)	Colors	Device memory	User data memory	Number of ports	Reference	Weight kg/lb
Via touchscreen	4.3" W	480 x 272	16 million colors	512 MB	512 MB	2x USB 1x Ethernet	HMISTW6200	0.400/0.880
	7" W	800 x 480 WVGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6400	0.800/1.760
	10.1" W	1,024 x 600 WSVGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6500	1.300/2.870
	12.1" W	1,280 x 800 WXGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6600	1.800/3.970
	15.6" W	1,366 x 768 FWXGA	16 million colors	512 MB	512 MB	2x USB 2x Ethernet	HMISTW6700	2.700/5.950

Harmony STM6 Modular HMI panels								
Data entry method	Size	Resolution (pixels)	Colors	Device memory	User data memory	Number of ports	Reference	Weight kg/lb
Via touchscreen	4.3" W	480 x 272	16 million colors	1 GB	128 MB	2x USB 2x Ethernet 1x COM1	HMISTM6200	0.490/1.080
	7" W	800 x 480 WVGA	16 million colors	1 GB	128 MB	2x USB 2x Ethernet 1x COM1	HMISTM6400	0.760/1.675

Interfaces				
Description	Characteristics	Compatible with panels	Reference	Weight kg/lb
RJ-45 to D-Sub 25 pin conversion cable	Connects a D-Sub 25-pin cable to this product (RJ-45)	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	–

Accessories				
Description	Characteristics	Compatible with panels	Reference	Weight kg/lb
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/set	–	HMIZGCLP1	–

Separate parts				
Description	Characteristics	Compatible with panels	Reference	Weight kg/lb
Screen protection sheet with UV protected	Disposable, dirt-resistant and ultra-violet protection sheet (1 sheet/set)	HMIST6200/HMISTW6200/HMISTM6200	HMIZG60W	–
		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	–



HMIZSUSBB2



HMIZG60W



XBTZ3002

Harmony ST6

High-resolution and cost-efficient basic HMI Accessories

STM6_CP20079



HMISTM6B

STM6_CP20076



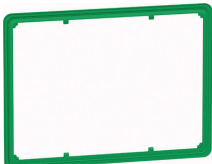
HMISTM64

ST6_85770_CPMFES18011A



HMIZSFIXTF1

ST6_85770_CPMFES18007A



HMIZS53W1

STM6_CP20074



HMIZM6DSA

STM6_CP20078



HMIZM6RDP5

Spare parts

Description	Characteristics	Compatible with panels	Reference	Weight kg/lb
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(2) (1 piece/each)	HMISTM6200/HMISTM6400	HMIZM6KIT	—
Installation fastener	Installation fastener	HMIST6200/HMISTW6200	HMIZSFIX2	—
		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 panel	HMIST6200/HMISTW6200	HMIZS51W1	—
		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	—
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	—

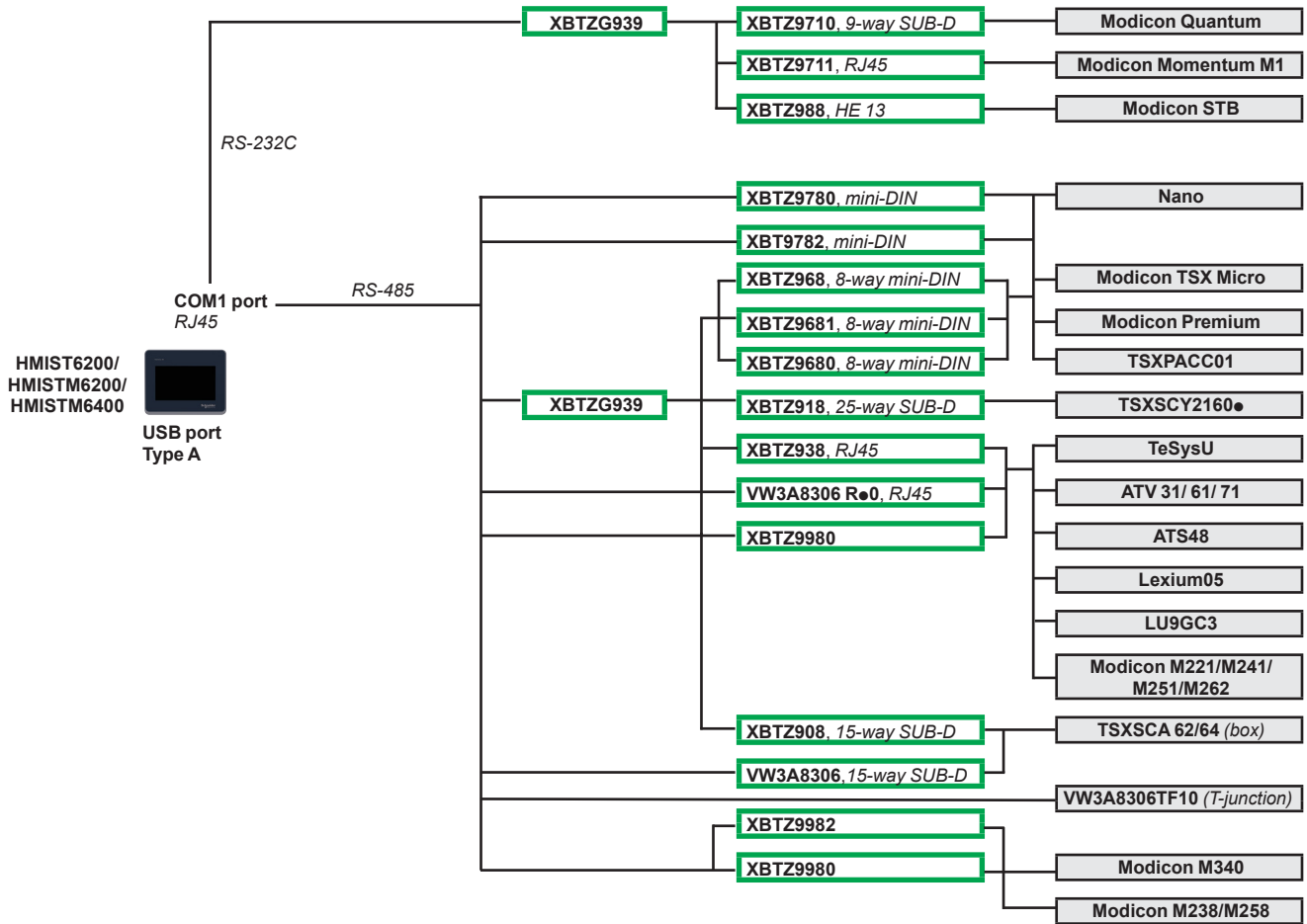
(1) 2 pieces/set for HMI6400/HMI6500/HMI6600 and 3 pieces/set for HMIST6700.

(2) USB Clamp mini-B can be used for optional USB micro-B cables.

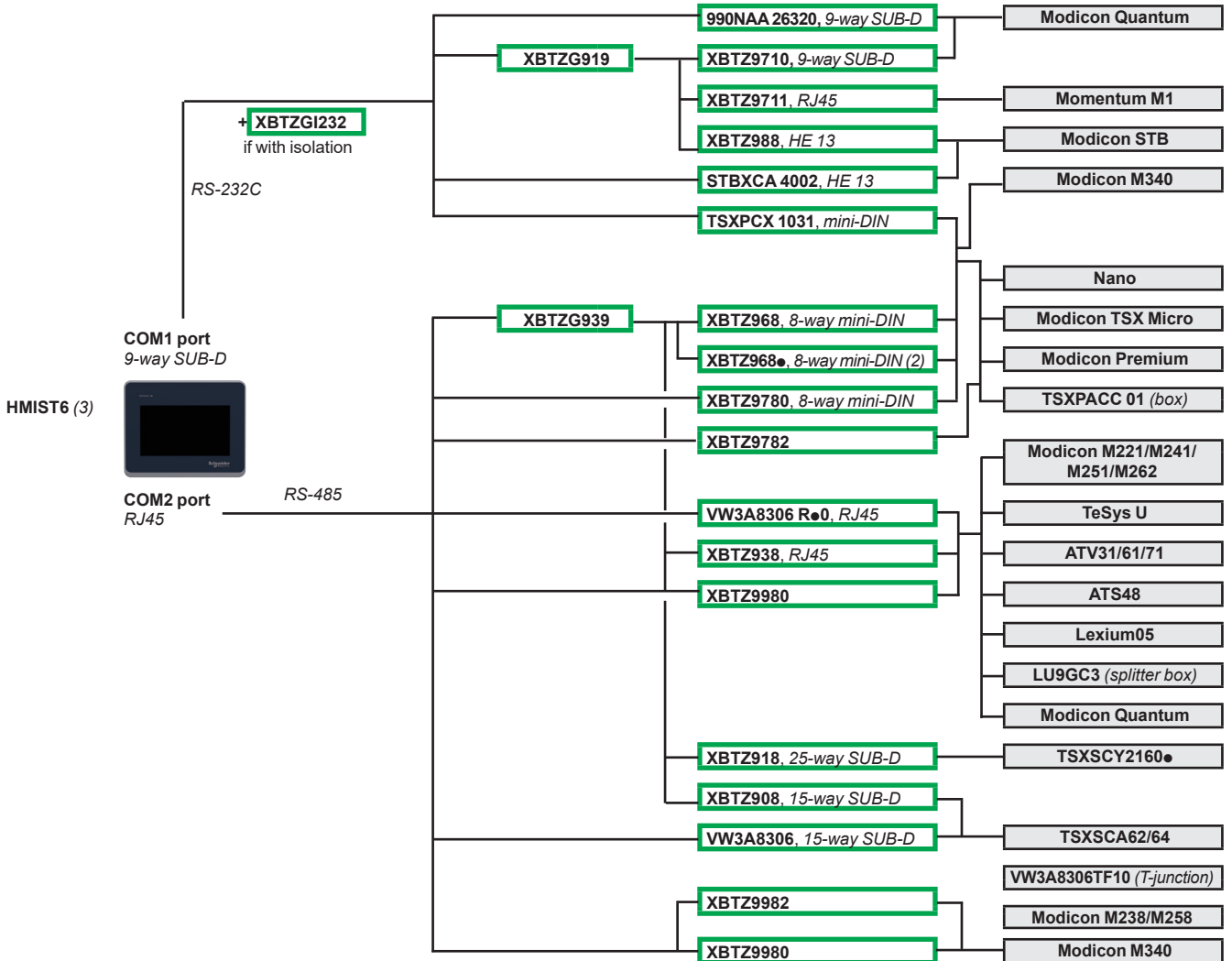
Harmony ST6

High-resolution and cost-efficient basic HMI
Connection system

HMIST6 panels and Schneider Electric products



HMIST6 panels and Schneider Electric products



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

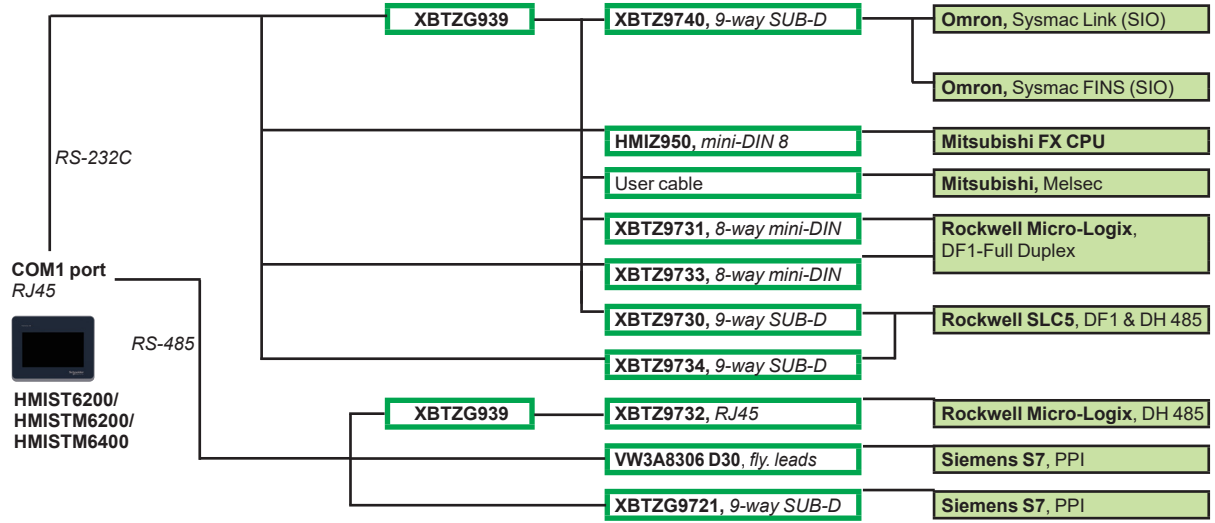
(2) ● defines the length:
 - 0: 2.5 m/8.2 ft (elbowed connector)
 - 1: 5 m/16.4 ft
 - 6: 16 m/52.5 ft
 - 7: 20 m/65.6 ft
 - 8: 25 m/82 ft

(3) Except HMIST6200.

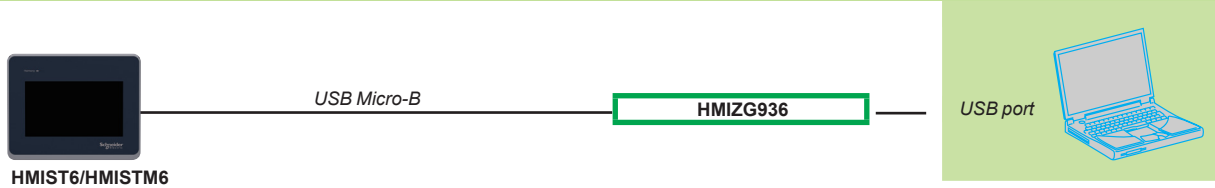
Harmony ST6

High-resolution and cost-efficient basic HMI
Connection system

HMIST6 panels and third-party PLCs



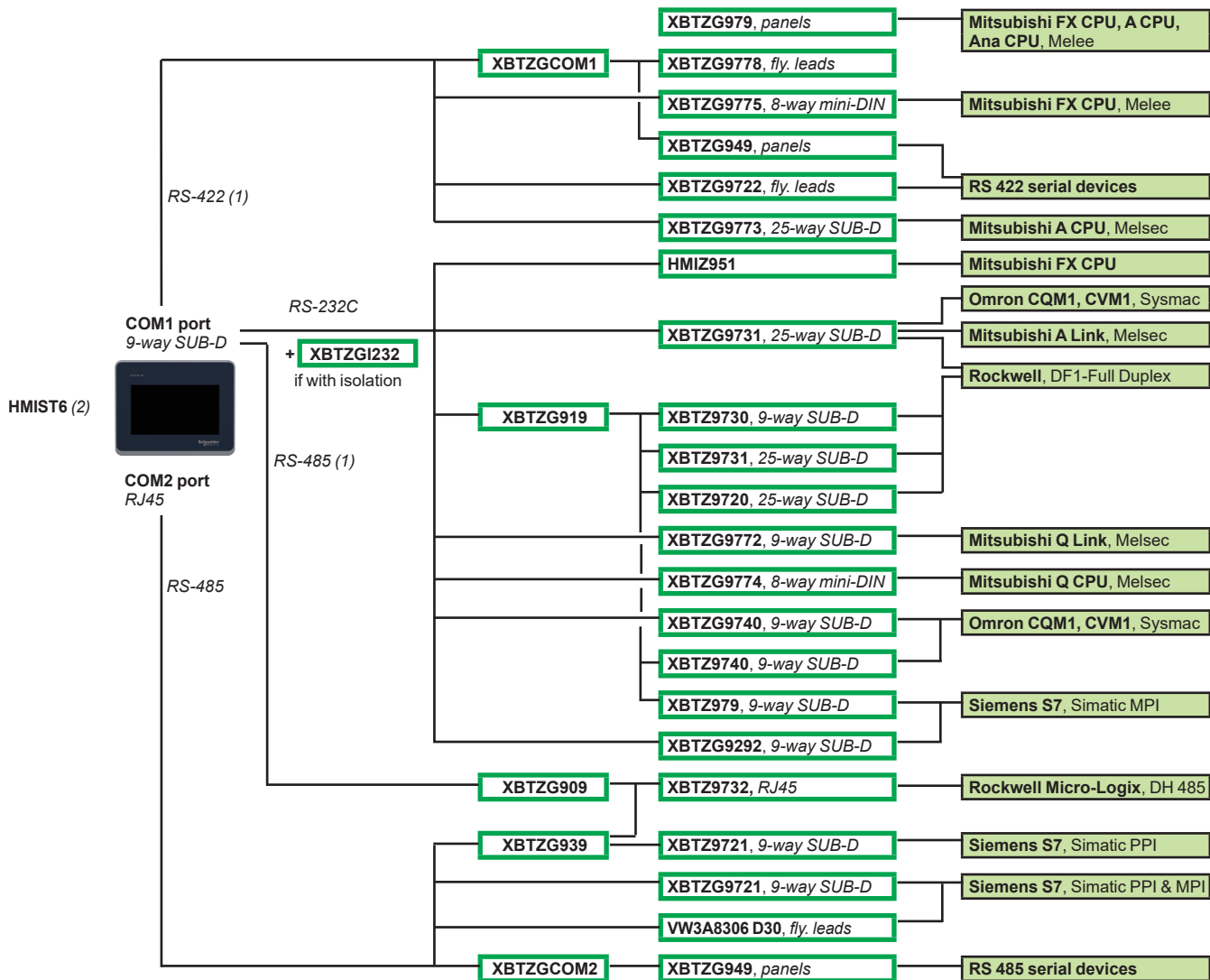
Application transfer from HMIST6 panels to PC



Harmony ST6

High-resolution and cost-efficient basic HMI
Connection system

HMIST6 panels and third-party PLCs



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

H		HMIZS57W1	19
HMIST6200	17	HMIZSBA1	19
	18	HMIZSFIX2	19
	19	HMIZSFIXTF1	19
HMISTW6200	17	HMIZSUSBB2	18
	18		
	19	X	
HMIST6400	17	XBTZ3002	18
	18	XBTZG919	18
	19	XBTZG939	18
HMISTW6500	17	XBTZGCOM1	18
	18	XBTZGI485	18
	19	XBTZGPWS1	19
HMIST6500	17	XBTZGUSB	18
	18		
	19	Z	
HMIST6600	17	ZB5AZ901	19
	18	ZB5AZ905	19
	19		
HMISTW6600	17		
	18		
	19		
HMIST6700	17		
	18		
	19		
HMISTW6700	17		
	18		
	19		
HMISTM6B	19		
HMISTM62	19		
HMISTM64	19		
HMISTM6200	17		
	18		
	19		
HMISTM6400	17		
	18		
	19		
HMISTW6400	17		
	18		
	19		
HMIZD66W	18		
HMIZG60W	18		
HMIZG63W	18		
HMIZG65W1	18		
HMIZG67W	18		
HMIZGCLP1	18		
HMIZM6DSA	19		
HMIZM6KIT	19		
HMIZM6MP2	19		
HMIZM6MP4	19		
HMIZM6RDP3	19		
HMIZM6RDP5	19		
HMIZM6RDP10	19		
HMIZS51W1	19		
HMIZS51W2	19		
HMIZS53W1	19		
HMIZS53W2	19		
HMIZS55W1	19		
HMIZS56W1	19		

Life Is On



Learn more about our products at
www.schneider-electric.com/hmi

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design: Schneider Electric
Photos: Schneider Electric

Schneider Electric Industries SAS

Head Office
35, rue Joseph Monier - CS 30323
F-92500 Rueil-Malmaison Cedex
France

DIA5ED2181202EN
November 2020 - V4.0