



## ST400 & ST401 24VDC, RS-232 or RS-422/485 Serial

### 3.8" Amber Low Cost Graphic Touch Screen

- Fast and Powerful 100Mhz RISC Processor.
- Six function buttons configurable per screen.
- Industry's best protocol support.
- Bar Code support for parts tracking and inventory control.
- Extensive Multi-language character support.
- Zero maintenance amber LED backlight applications needing high contrast and visibility.
- UL Listed, Class 1, Division 2 hazardous location certifications.

**ST400-AG41-24V (RS-422/485)**  
**ST401-AG41-24V (RS-232)**



## FEATURES

- 3.8 Inch Touch Screen
- LED Backlit Amber LCD
- 320 x 240 QVGA Resolution
- Supports Wide Variety of Serial Protocols
- RS-422/485 Com Port (ST400)
- RS-232 Com Port (ST401)
- Six Function Keys
- 24V DC Power
- Multi-language

## INFORMATION



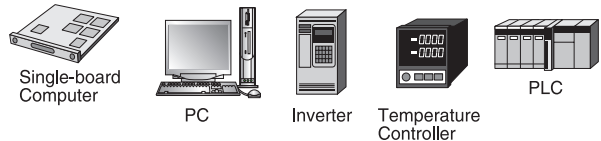
**Powered by:  
GP-PRO/PB III C  
Package03 HMI Screen  
Editor Development  
Software**

- Advanced featured graphics editor for drawing objects, animation, creating pre-configured operator objects, etc.
- Recipes Trending, Alarm/Event Management, Scheduling, Pop-up keypads, etc.
- Password protected; 15 level security.
- Time scheduling for equipment start uptime and periodic tasks.
- Script functions to interface to custom OEM equipment.

## COMMUNICATION

**Versatile interfaces support flexible and expanding control system needs:**

- **Connect to various controllers via RS-232, RS-422, or RS-485 serial port.**



- **Also supports serial devices; such as single or two-dimensional bar code readers.**



## CONNECTIVITY

Pin Connection	Pin No.	Signal	Signal Name	Direction
<b>ST400 RS-422 Serial Interface</b> 	1	RDA	Receive data A	Input
	2	RDB	Receive data B	Input
	3	SDA	Send data A	Output
	4	ERA	Enable receive A	Output
	5	SG	Ground	-
	6	CSB	Clear send B	Input
	7	SDB	Send data B	Output
	8	CSA	Clear send A	Input
	9	ERB	Enable receive B	Output

Pin Connection	Pin No.	Signal	Signal Name	Direction
<b>ST401 RS-232 Serial Interface</b> 	1	CD	Carrier detect	Input
	2	RD	Receive data	Input
	3	SD	Send data	Output
	4	ER	Enable receive	Output
	5	SG	Ground	-
	6	DR	Data set ready	Input
	7	RS	Request send	Output
	8	CS	Clear send	Input
	9	RI	Ring indicate	Input



### Partial List of Controllers Supported:

- |               |                     |
|---------------|---------------------|
| GE Fanuc      | Koyo                |
| Schneider     | Omron               |
| Fuji Electric | Rockwell            |
| Modicon       | Siemens             |
| Mitsubishi    | Matsushita          |
| Yokogawa      | Toyota ... and MORE |

# ST400 & ST401 SPECIFICATIONS

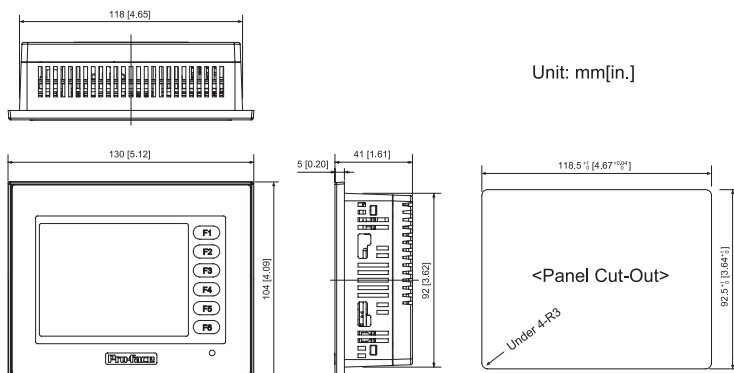
## FUNCTIONAL SPECIFICATIONS

Display Type	Amber Monochrome LCD
Display Colors	Monochrome; up to 8 levels of gray
Backlight	LED backlight maintenance free
Display Resolution	320 x 240 pixels
Effective Display Area (mm)	W76.7mm [3.02in.] x H57.5mm [2.26in.]
Brightness Control	2 levels of adjustment available via touch panel
Contrast Control	8 levels of adjustment available via touch panel
Character Sizes	8x8, 8x16, 16x16, 32x32 dot fonts
Font Sizes	Width can be expanded 1 to 8 times. Height can be expanded 1/2 and 1 to 8 times
Memory - Application	640KB FLASH EPROM
Memory - Data Backup	96KB SRAM - uses a lithium battery
Serial (COM 1) Interface	(ST400) RS-422 / RS-485, 9-pin D-sub, Data Transmission Speed: 2400 to 115.2 kbps (ST401) RS-232, 9-pin D-sub, Data Transmission Speed: 2400 to 115.2 kbps
Tool Connector Port	8-pin mini Din, Asynchronous TTL Level non-procedural command interface for program download, barcode reader interface

## GENERAL SPECIFICATIONS

Electrical	Input Voltage	24VDC
	Rated Voltage Range	19.2VDC to 28.8VDC
	Power Consumption	7W or less
Environmental	Ambient Operating Temp.	0°C to 50°C (Cabinet interior and panel face)
	Storage Temperature	-20°C to 60°C
	Operating Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
	Storage Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
Structural	Vibration Resistance	IEC61131-2 (JIS B 3501) compliant. When vibration is NOT continuous: 10Hz to 57Hz 0.075mm, 57Hz to 150Hz 9.8m/s <sup>2</sup> . When vibration is continuous: 10Hz to 57Hz 0.035mm, 57Hz to 150Hz 4.9m/s <sup>2</sup> X,Y, Z direction for 10 times 80 min.)
	Ratings	NEMA TYPE#250 Type 4 x/12 Equivalent to IP65 (Indoor use only)
	Certifications	UL/cUL Listed, UL508, UL1604 CL 1 Div 2, CE EN55011, EN61000-6-2
	External Dimensions	W130mm[5.12in.] x H104mm [4.09in.] x D41mm [1.61in.]
	Weight	0.4kg (1.1lb) or less

## EXTERNAL DIMENSIONS



## SOFTWARE COMPATIBILITY



**Powered by:**  
**GP-PRO/PB III C Package03**  
**HMI Screen Editor Development**  
**Software**

## ORDERING INFORMATION

### ORDER NUMBER

ST400-AG41-24V

ST401-AG41-24V

### OPTIONAL ACCESSORIES

GPW-CB02

GPW-CB03

HMI-CAB-ST001

ST400-DF01

PLC Cable

### DESCRIPTION

3.8" Amber, 640KB Mem., 1 RS-422/485 Serial Port, 24VDC, UL, CE

3.8" Amber, 640KB Mem., 1 RS-232 Serial Port, 24VDC, UL, CE

Programming Cable, PC RS-232, 9 pin D-Sub application download cable

Programming Cable, PC USB, application download cable

Generic serial communication cable, ST40x to open end wires, 3 meters

Overlay Screen Protection Sheet (qty 5)

Wide variety of PLC cables available

**Xycom Automation, Inc.**  
**a Pro-face America Company**

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**Fax: 734-429-1010**

**http://www.xycom.com**

**Customer Support Hotline:**

**734-944-0482**



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