



ST402-AG41-24V



ST402 - 24VDC, Siemens MPI 485

3.8" Amber Low Cost Graphic Touch Screen

- Fast and Powerful 100Mhz RISC Processor
- Six function buttons configurable per screen
- Direct support for Siemens MPI 485 communications
- UL CL1, Div 2 certifications
- Bar code reader support for security systems and inventory control
- Extensive Multi-language character support
- Zero maintenance LED backlight ideal for applications needing high contrast and visibility

FEATURES

- 3.8 Inch Touch Screen
- LED Backlit Amber LCD
- 320 x 240 QVGA Resolution
- 15-Level Password Security
- Siemens MPI 485 Com Port
- Secondary RS-422 (Limited) Serial Port
- Six Function Keys
- 24V DC Power
- Multi-language

INFORMATION



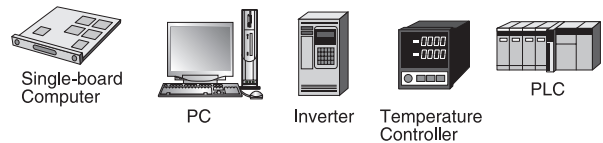
**Powered by:
GP-PRO/PB III C
Package03 HMI Screen
Editor Development
Software**

- 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 via Siemens MPI 485 Interface



■ Supports serial devices such as single or two-dimensional bar code readers



CONNECTIVITY



**Siemens MPI RS-485
Serial Interface**

Pin Connection	Pin No.	Signal	Signal Name	Direction
	1	NC	No connection	-
	2	NC	No connection	-
	3	LINE(+)	Line (+)	In/Output
	4	RTS	Request Send	Output
	5	SG	Ground	-
	6	5V	5V External Output ^{*2}	Output
	7	NC	No connection	-
	8	LINE(-)	Line (-)	In/Output
	9	NC	No connection	-

*1 The connector of the ST side is socket type.

**Port 2 RS-422 Serial Expansion Interface
for scripting and bar code readers *1**

Pin Connection	Pin No.	Signal	Signal Name	Direction
	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

*1 The connector of the ST side is pin type.

Note: Standard serial protocol drivers are not supported with this port. Use ST400 model for RS-422 / RS-485 applications.

ST402 SPECIFICATIONS

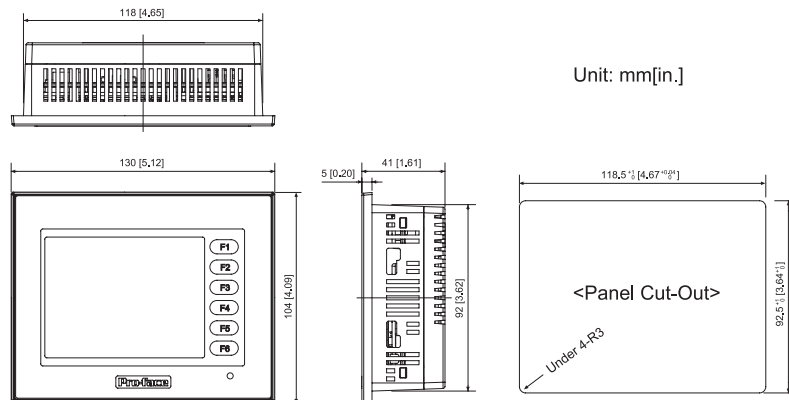
FUNCTIONAL SPECIFICATIONS

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	640 KB FLASH EPROM
Memory - Data Backup	96 KB SRAM - uses a lithium battery
Serial Interface	Siemens MPI RS-485, 9-pin D-sub, Data Transmission Speed: 2400 to 187.5 kbps
Expansion Serial Interface	RS-422, Data Transmission Speed: 2400 to 38.4 bps for scripting and bar code readers
Tool Connector Port	8-pin Din, Asynchronous TTL Level non-procedural command interface for program download, bar code 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, wetbulb temperature: 39°C or less)
	Storage Humidity	10%RH to 90%RH (non-condensing, wetbulb 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 ² . When vibration is continuous: 10Hz to 57Hz 0.035mm, 57Hz to 150Hz 4.9m/s ² X,Y, Z direction for 10 times (80min.)
	Ratings	NEMA TYPE#250 Type 4 x/12 Equivalent to IP65
	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



GP-PRO C-Package 03 HMI Development software

ORDERING INFORMATION

ORDER NUMBER

DESCRIPTION

ST402-AG41-24V 3.8" Amber, 640KB Mem., 1 Siemens MPI 485 Port, RS-422 port, 24V, UL, CE

OPTIONAL ACCESSORIES

GPW-CB02	Programming Cable, PC RS-232, 9 pin D-Sub application download cable
GPW-CB03	Programming Cable, PC USB, application download cable
HMI-CAB-ST001	Generic serial communication cable, ST40x to open end wires, 3 meters
ST400-DF01	Overlay Screen Protection Sheet (qty 5)
CA3-CBL422/5M-01	RS-422 cable, 5M, connects ST400/402, other end is 6 wire spade lug

Xycom Automation, Inc.
a Pro-face America Company
734-429-4971
Fax: 734-429-1010
<http://www.xycom.com>

Customer Support Hotline:
734-944-0482



© 2005 Xycom Automation, Inc. Is a wholly owned subsidiary of Pro-face America, Inc. Specifications may change without notice. Xycom Automation is a trademark of Xycom Automation. Other brand or product names are the property of their respective owners.