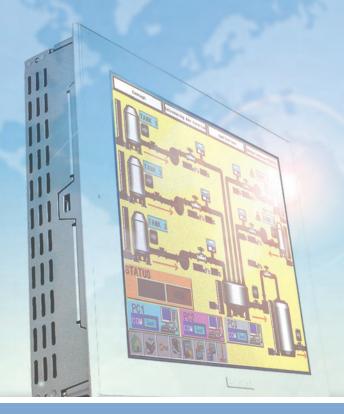
Corporate Overview

AGP3000 Series Operator Interface GP-Pro EX HMI Software

Pro-Server EX Data Management Software AGP3000 Hardware Specifications

HMI Connectivity and Accessories





AGP3000 Series: Advanced Operator Interfaces for the Competitive Edge

xycom.com





Courtesy of Steven Engineering, Inc. • 230 Ryan Way, South San Francisco, CA 94080-6370 • General Inquiries: (800) 670-4183 • www.stevenengineering.com

The Best in Human Machine Interfaces



Globally recognized, globally supported, globally trusted.

- We are the leading independent global supplier of industrial computing and visualization solutions for automation and manufacturing applications.
- We continue to set the standards for HMI solutions by offering the industry's most extensive product offerings and the highest levels of connectivity and support.

Pro-face HMI Operator Interfaces

Programmable graphic HMIs

- 3.8" to 15" crisp, clear HMI displays
- TFT, STN color or mono touch screens
- Data sharing & collection through OPC, DDE, SQL, etc.
- Web-enabled & remote monitoring capabilities
- Large selection of controller connectivity
 Ethernet, USB, RS232, RS422/485 and
- CompactFlash™ interfaces ■ Full-featured HMI screen editor software

HMI logic controllers

- 5.7" to 12.1" dedicated touch-screen logic controllers
- Supports local or distributed I/O applications
- Low-cost standalone or networked units
- TFT color and mono graphics displays
- Large selection of protocol connectivity
 Data sharing & collection through CompactFlash, OPC, DDE, SQL, etc.





Xycom HMI Industrial Computers & Monitors

Industrial computers

- 8.4" up to 15" TFT displays
- Up to 1024 x 768 XGA resolution
- Intel[®] Pentium III and 4 CPUs
- Up to 2.4 GHz processor speed
- UL, cUL HazLoc approvals
- NEMA 4/4X/12 front panel ratings
- Touch screens and/or keypads
- Extensive I/O connectivity
- 20 years of cutout compatibility

Flat-panel monitors

- 10" up to 19" TFT displays
- Up to 1280 x 1024 SXGA resolution
- NEMA 4/4X/12 front panel ratings
- UL, cUL HazLoc approvals
- Touch screens and/or keypads
- Adapters for cutout compatibility

World-class HMI products, service, support and reliability.

Advanced operator interfaces for the competitive edge



An extensive line of HMI operator interfaces with the features you need, designed to lower your costs and improve your manufacturing processes

Lowers your HMI development cost

- Easy-to-learn, self-guiding HMI development environment requires less time to master
- Extensive, built-in, time-saving features help you develop fast, consistent, standardized graphical interfaces

Increases your productivity & product quality

- Monitor, collect, analyze and report up-to-the-minute production data using Pro-Server EX data management software
- AGP3000's extensive connectivity allows you to choose best-in-class complementary products, such as PLCs, drives and controllers, to match your application needs – without worrying about compatibility

Supports a more responsive and efficient work force

- Use multimedia features to create detailed audio and visual standardization maintenance guides
- Gain instant access to machine training videos at each operator workstation

Reduces machine downtime

- Use Event Recorder to capture machine faults
- · Link video playback to alarm conditions
- Play instructional videos to help you quickly isolate and correct the problem
- Reduce your on-site field support calls by using remote maintenance feature

All the Best Features in One Product Family

HMI operator interface solutions

- •Data management solutions
- •Multimedia HMI solutions
- •HMI Control Solutions
- •Built-in security HMI solutions
- •Distributed & integrated I/O solutions
- Point-to-point data-sharing HMI solutions

Connectivity

- Ethernet
- •Audio/video
- •USB
- CompactFlash[™]
- •RS-232/422/485
- Multi-protocol

Performance

- •Crisp, clear, bright displays
- •Wide viewing angles
- •No-grid, analog touch screen
- 65K color support
- •64-bit RISC CPU
- Fast data sampling

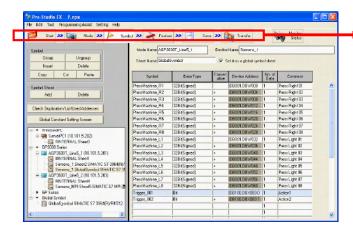
Get More From Your HMI With Pro-Server EX



Up-to-the-minute, accurate data to optimize your productivity and maximize profits.

Collect, monitor and share factory-floor data:

- When you need it
- Where you need it
- With those who need it

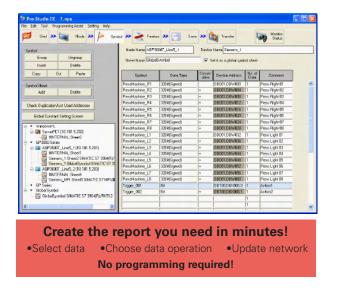


Includes 29 easy-to-use Excel® templates

- •Daily/monthly/yearly report
- Downtime shift
- •Failure rate data

4

- Preparation time graph
- •Direct first-run graph



Data Management Enhanced connectivity software

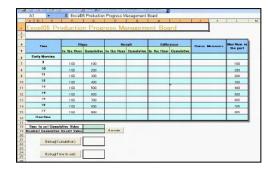
Data shared throughout your enterprise

Fast and simple setup

- Fill-in-the-blank data configuration, no programming!
- Built-in templates save you time and get you started quickly
- Shares data with Windows[®]-based applications
- Up-to-the-minute production data
- Collect and share data with multiple AGP HMIs and other departments

Report examples

Production Planning and Product Output Monitoring



Up-to-the-minute Productivity Efficiency Reports



Factory-Floor Data at Your Fingertips



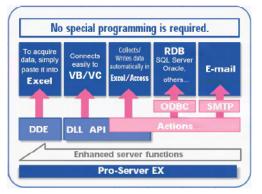
Pro-Server EX is cost-effective data management software that allows data collected by Pro-face operator interfaces to be shared and directly integrated into your existing MRP, MES business system or any Windows-based application. No additional drivers or software needed! Pro-Server EX takes advantage of all the protocol connectivity built into GP-Pro EX, allowing you to share data anywhere.

Connectivity support

DDE API (for VB or VC++) SMTP e-mail DLL ODBC Excel Access SQL Server

Requires: Windows[®] 2000 (Service Pack 3 or later), Windows[®] XP Home Edition/ Professional or/Server Intel Pentium[®] III 500MHz or more

Architecture overview



Applications

- Share HMI data with your PC server
- Share HMI data with another HMI -Peer-to-peer data sharing with any Ethernet-based Pro-face HMI
- Write data to and log data from PLC
- Send e-mail to desktop, cell phone, pager, via SMTP
- Collect and write data
 In Excel, CSV file, to or from database

Integrate into your existing enterprise system. Save your budget, and save thousands of dollars per year!

Easy-to-Learn, Powerful HMI Development Software

GP-Pro SELF-GUIDING Intuitive HMI Screen Development Editor

With GP-Pro EX's simple four-step navigation process, HMI development has never been easier – or faster

Four Simple Steps Icons across the top of the editor guide you 111 through the four basic steps of screen editing 0 La? with GP-Pro EX software! 11 23 10 A R 1000 t \cdots 🐹 🖩 🏨 · 🔛 · 🔛 · 🗸 🖪 💌 · 🗖 e 1 🗐 Data Display Part 430 G . X . . . Edit System Settings Preview Transfer Part ID 3 (OVER VIEW) INVER VIEW2 20 10-41 INTERNALLS (PC STATUS) 16 Bk De (SW 1) 10 (KEYBOARD) 0001 ON OFF ESTABLISH SYSTEM SETTINGS EE Se **Device Settings** III Intuitive Communication Set-up ain Unit Setting • Configure up to four different protocols that Font Settings **GP-Pro EX** operate simultaneously Development • One-step bar-code reader setup Environment oberal List · Scripting functions for interfacing to custom Device/PLC Set or proprietary third-party devices Lists recently used devices for fast access **Bar Code Sett** to relevant controllers Script Setting



EDIT SCREENS

III **Powerful, full-featured HMI editor for fast screen development** *Create complex HMI screens and reusable templates in minutes!*

- Huge graphic parts library with high-resolution 2D and 3D part images
- Create standardized header and footer templates
- Multi-functional switches with on/off delay two-touch function
- Use any Windows[®]-based font for crisp and smooth, easy-to-read text, plus unlimited character sizing
- Double-click on a part to pop up its attribute window for easy editing
- Drag and drop parts between two projects edit both simultaneously!



More than 1800 parts and symbols



One-click access to multiple user-defined headers (i.e. title) and footers (i.e. menu) for perfect placement. Edits to headers/footers update all screens simultaneously!



PREVIEW YOUR APPLICATION SCREENS

 Preview your HMI application on your PC and spare yourself from unnecessary downloads.
 Review your HMI screens on your PC to fine-tune the look and feel of your application. Saves valuable time!

- Allows you to enter data and preview the results, enhancing screen development
- Built-in documentation support feature allows you to quickly create an HMI specification based on selected criteria
 - Add screen captures to create clear specifications for engineering documents

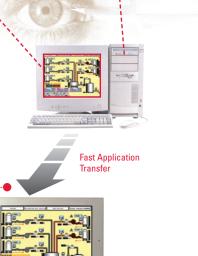


GP-Pro

TRANSFER YOUR APPLICATION...AND GO!

III Download your applications in seconds, not minutes! Large HMI projects? No problem. The ultra-fast AGP3000 64-bit RISC processor provides speedy and efficient application upload and download file transfers.

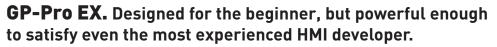
- Built-in, powerful error-checking features
 - GP-Pro EX will automatically check for errors before downloading your project
 - If an error is detected, a new status window opens to quickly indicate the error and where it occurs within your application
- Download your HMI application through the Ethernet or USB ports
- Do field upgrades using the CompactFlash[™] port no software required!



AGP3000

INSTANT PREVIEW





- •Create highly detailed and secure applications
- •Speed up development with extensive time-saving features
- •Interface to any controller with extensive built-in connectivity

Start today!

Download a trial version today at www.xycom.com.

GP-Pro EX – The Features You Depend On



HMI Screen Editor

Self-guiding software for all AGP3000 Series HMI models

All the tools you need to create highly functional, friendly and versatile HMI applications

Setup, graphics and editing



Extensive image parts, symbols & fonts library

- III Over 1,800 high-quality 3D parts provide international recognition of symbols overcoming language barriers.
- III BMP and JPG files can be freely placed and reduced/enlarged with high clarity.
- III Windows®-based image fonts provide a wide range of font characters and crisp, readable text with unlimited sizing capabilities.

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Visual PLC address mapping

- III Smart visual address mapping for fast PLC-address-to-part communication connections
 - Drag and drop PLC address onto part to quickly link controller address to pushbutton, tank, graph, etc.
 - · Gives a quick visual check on how each part is mapped to controller or I/O device
 - · Significantly reduces screen development time
 - Quick indication of what controller addresses are still available

Multi-action switches

- III Execute multiple actions with one switch
- III No need to stack switches, leading to possible operator error
- III Choose Bit Switch, Word Switch, Set Action setting, PLC Address, etc.



Easy bar-code reader setup

- III As simple as enabling the COM port the reader is connected to
- III Data is instantly displayed on the screen or can be logged
- III Use for parts tracking or identifying machine operator

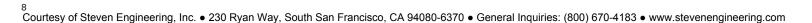


Part property window

- III <u>Property Window</u> for quick review and changes of objects.
 - Change part or symbol
 - Change part attribute colors
 - PLC communication address
 - Part function type
 - (e.g. Momentary to Toggle)

CompactFlash[™] (CF card)

- III Download HMI application to CompactFlash
- III OEM machine field upgrades no software needed!
- III Log critical data to CF card for later retrieval and analysis
- III Store large image files



User-defined macro functionality

Powerful D-scripting

 Extend your serial communications capabilities!
 Write your own simple ASCII protocol to communicate to custom controllers, thirdparty I/O boards, and interface to legacy

plant-floor equipment Create data logging algorithms – log to internal memory, CompactFlash, or print directly from AGP's touch screen, etc.

III Develop custom functions (macros) to execute a sequence of events.

	B ID 00000 3
Desception Expression Lamba - andi box - endo 2mail Concestion Concestion Locies (AND DISC)	Comment Laneage Atta P drake belog feets Tone Tone
Lanced 10.000 Scandin 100 mm Sharing main lance mm Sharing main lance mm Sharing main lance mm Sharing main lance Lanceter Limit Oceanie Schematorial Schematoria	000 Fifth (100,100,100,000,100,000,100,100,100,0000
Hight Shift (201) Dit Connette Logical AND (%)	Manapa Awa
It Construction and Annual States (Construction Construction (Construction (Construction (Construction))) (Construction) (Cons	The excellent expression has no publics.

Timer		-
Continuo	us Action	
Timer		
Bit ON		
Bit OFF		
Bit Chane	ae	
	ondition is Satisfied	
When Co	ondition is not Satisfied	

Select from various types of triggers for maximum flexibility of operations.

Advanced functionality

Recipes

- III Create hundreds of recipes and load them from internal memory or CompactFlash (CF) card
 - · View all recipes on one screen or use multiple screens
 - Transfer recipe values to and from PLC
 - Create recipes via CSV files and transfer to AGP3000. Lets you write recipes in Excel[®] or other documents

Data logging and historical trending

- III Store data to CompactFlash (CF) or to a PC server for report generation
- III View data from AGP3000 in historical graph format
- III Real-time report generation



Security pop-up keypads

- III Keep unauthorized users from viewing or modifying critical areas of your HMI application
 - Built-in 16 security level features to view and/or modify screens, system design
 - View data based on access level (e.g. production operator, maintenance personnel, plant-floor supervisor, HMI design engineer, etc.)



Various types of numeric and alphanumeric keypads are available.

Alarms and events

- III Quick visual of current, event-triggered and historical alarms
- III View list and review detailed alarm descriptions
- III Acknowledge alarms and take action or Reset and Revert back to normal operating mode

Time scheduling

- III Standardize equipment start-up times
- III Monitor productivity from each production shift
- III Set up periodic routine maintenance schedules
- III Use time scheduler to limit access to machine operations



- III Supports up to 16 different languages simultaneously
- III English, French, German, Spanish, Asian languages, etc.
- III Operators can view all screen images in the language of their choice



Multimedia: A new world of possibilities for HMI developers

Now you can do what you always wanted to do:

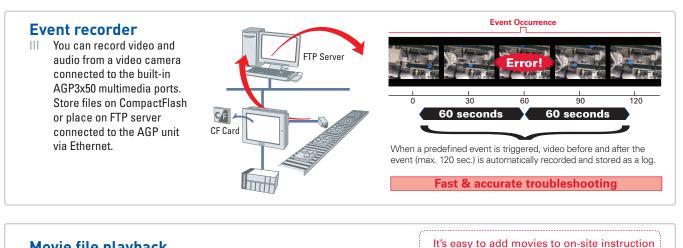
- Capture the moment Record the events that lead to machine breakdown
- Create online audio/video machine tutorials. Keeps the operator trained with latest procedures
- Record and play back audio Leave audio messages or instructions for next shift operator

Reduce downtime

-Use the movie converter software for instructor-type maintenance procedures

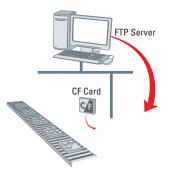
-Use video cameras for remote monitoring and troubleshooting machines

Make a good impression – Enhance the operator interface experience.



Movie file playback

III You can use the display of the AGP3000 to play back movie files. Simply select the desired files from a CompactFlash card or FTP server. You can also loop a series of movies.



screens for better comprehension. Tank A.B Flow mo



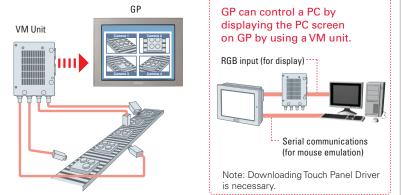
And now, you can create movie files with commercially available video software.

Note: Movie files you create must be converted with the Movie Converter EX converter tool, which requires the purchase of a license.

Video mix unit connection

III With a VM unit (optional), visual monitoring of work details and conditions on the production site is available in real time. Up to four cameras can be connected, with all four images displayed simultaneously on one AGP3000 screen.

Note: Not all models can connect the VM unit.

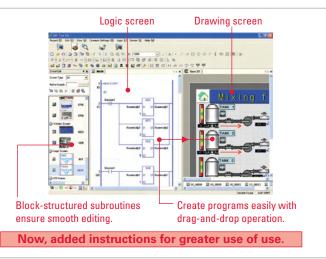


HMI control: Operator interfaces with built-in logic programming

More capabilities and features for demanding HMI applications

Logic program

- III Develop logic programs and algorithms, as well as your HMI screen application, using the same AGP3000 development environment.
- III Import logic programs created from previous versions of GP-Pro/PBIII C-Package for easy upgrade to AGP3000 products.
- III Symbols for drawing/editing images and variables for creating logic programs are unified.
- III Symbol variables for drawing images and creating logic programs are not required to be imported or exported.
- III Block-structured subroutines reduce steps for development and management of logic programs.



Logic monitoring function

- III You can use a variety of AGP monitoring screens to check logic programs.
- III English/Japanese display is selectable.



Logic display

Displays an entire logic program so you can check the operating status and the layout of instructions.



Address display

The addresses used in a logic program are listed so you can verify the names and current values of variables.

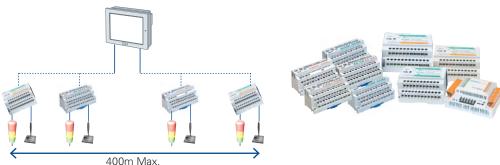
Build a Complete HMI Control System

Create an entire distributed I/O graphical HMI application using Pro-face AGP3000 HMI, GP-Pro EX HMI development software and any combination of Pro-face Flex Network I/O modules.

Features include: timers, counters, logical operations, mathematical, bit operation, etc. Mix and match any combination of analog and digital I/O modules.

63 stations max.

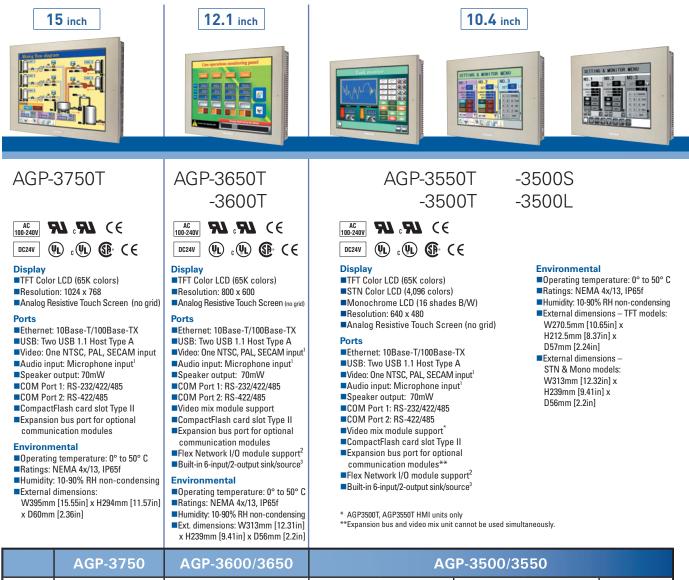
- 256 input points max.
- 256 output points max.
- 64 integer inputs max.
- 64 integer outputs max.



Use one HMI and control development environment to minimize the number of software packages you need to maintain and significantly reduce your support and maintenance costs.

AGP3000 Series HMI Operator Interface and HMI Control

AGP3000 Series Lineup



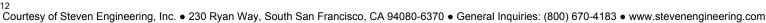
		AGP	3750	AGP-3600/3650		AGP-3500/3550				
Display Type		Т	FT	т	FT	т	FT	s	TN	Mono
Rated Voltage		AC100- 240V	DC24V	AC100-240V	DC24V	AC100-240V	DC24V	AC100-240V	DC24V	DC24V
Advanced Multimedia		AGP3750-T1-AF	AGP3750-T1-D24	AGP3650-T1-AF		AGP3550-T1-AF				
2p	DIO Sink			AGP3600-T1-AF-D81K	AGP3600-T1-D24-D81K	AGP3500-T1-AF-D81K	AGP3500-T1-D24-D81K	AGP3500-S1-AF-D81K	AGP3500-S1-D24-D81K	
HMI Control Integrated	DIO Source			AGP3600-T1-AF-D81C	AGP3600-T1-D24-D81C	AGP3500-T1-AF-D81C	AGP3500-T1-D24-D81C	AGP3500-S1-AF-D81C	AGP3500-S1-D24-D81C	AGP3500-L1-D24-D81C
토노	Fle x Network			AGP3600-T1-AF-FN1M	AGP3600-T1-D24-FN1M	AGP3500-T1-AF-FN1M	AGP3500-T1-D24-FN1M			
Standard HMI				AGP3600·T1·AF	AGP3600-T1-D24	AGP3500-T1-AF	AGP3500-T1-D24	AGP3500-S1-AF	AGP3500-S1-D24	AGP3500-L1-D24

¹AGP3x50 models only

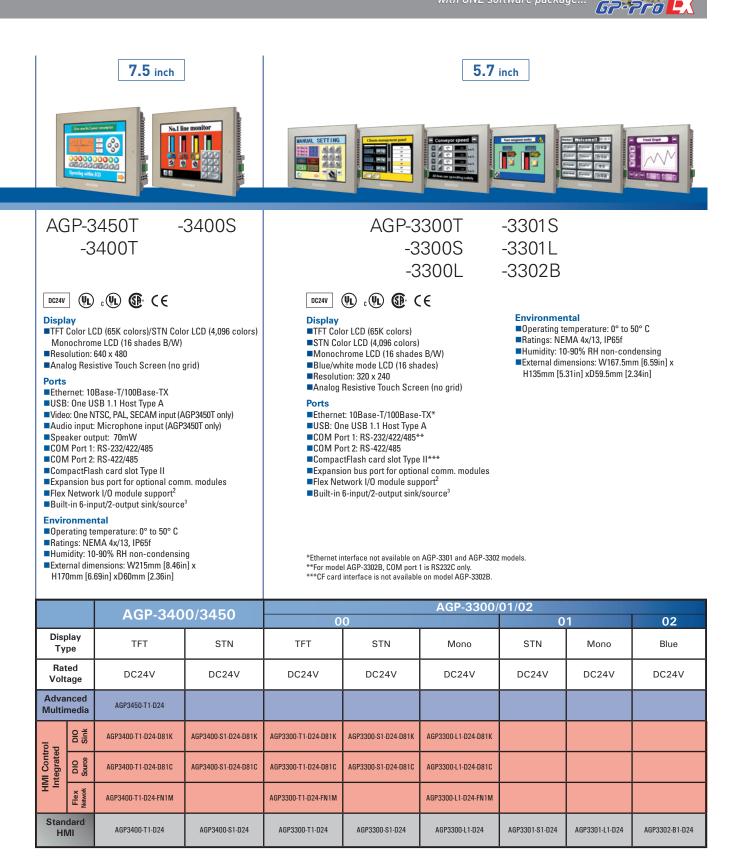
²Discrete I/O AGP3000 "-FN1M" HMI units only

3AGP3000 "-D81K" and "-D81C" HMI units only

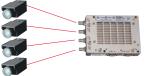




AGP3000 Series models configured with ONE software package...



Video Mix Unit I/F

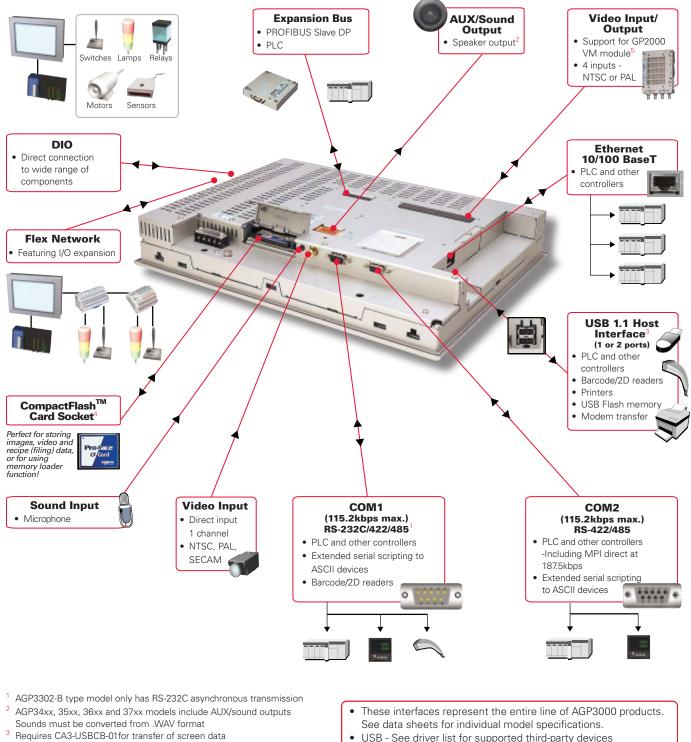


Video Mix Unit Interface with four-camera NTSC/PAL input +RGB in/out (GP2000-VM41)

13

The only HMI you need.

The AGP3000's extensive array of connectivity options makes it easy to standardize on one HMI model.



- Not available on 3302B
- ⁵ Compatible with AGP35xxT and 36xxTTFT display models only
- USB See driver list for supported third-party devices
- Up to four PLC protocols simultaneously (AGP33xx supports two).
- Please refer to documentation for allowable configurations.

Interface to Virtually Anything on the Factory Floor!

Interface/Model	3302B	3300L/S/T	3400S/T	3450T	3500L/S	3500T	3550T	3600T	3650T	3750T
COM1 (115.2kbps max.) RS-232C/422/485	Yes (RS232C ONLY) DB9 Socket Type	Yes	Yes	Yes						
COM2 (115.2kbps max.; 187.5kbps for MPI direct) RS-422/485	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ethernet 10/100 BaseT	-	Yes	Yes	Yes						
USB 1.1 Host Interface	1 port	1 port	1 port	1 port	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports
CompactFlash Card Socket	-	Yes	Yes	Yes						
Expansion Bus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Video	-	-	-	1 Ch Video In	-	-	1 Ch Video In	-	1 Ch Video In	1 Ch Video In
GP2000-VM41 Support	-	-	-	Yes		Yes	Yes	Yes	Yes	
Sound	· ·	-	Yes	Yes ¹	Yes	Yes ¹	Yes ¹	Yes	Yes1	Yes1
DIO	· ·	Yes ²	Yes ²	-	Yes ²	Yes ²	-	Yes ²	-	-
Flex Network	-	Yes ³	Yes ³	-	Yes ³	Yes ³	-	Yes ³	-	-

¹Sounds must be converted from .WAV format. Note: AGP3x50 models also include one microphone input. ²Sink or Source, depending on model; refer to individual data sheets. ³F/N AC/DC models vary; refer to individual data sheets

Drivers

PLC Drivers Rockwell Automation DF1 DH-485 Ethernet I/P (Native tag support)

Siemens AG SIMATIC S7 3964(R)/RK512 SIMATIC S7 MPI Direct SIMATIC S7 Ethernet

GE Fanuc Automation Series 90 Ethernet (SRTP) Series 90-30/70 SNP Series 90-30/70 SNP-X

Schneider Electric MODBUS SIO¹ Master MODBUS TCP Master Uni-Telway Modbus Slave (SIO¹ or Ethernet¹)

Sharp Mfg. Corp. JW Series Computer Link SIO

YOKOGAWA Electric Corp. Personal Computer Link SIO Personal Computer Link Ethernet

LS Industrial Systems Master-K Cnet

TOYOPUC CMP-LINK SIO TOYOPUC CMP-LINK Ethernet Fuji Electric Corp. MICREX-F Series SIO

Mitsubishi Electric Corp.

A Series CPU Direct A Series Ethernet A Series Computer Link FX Series CPU Direct FX Series CPU Direct Q/QnA Serial Communication Q/QnA Series Ethernet Qna Series CPU Direct QUTE Series CPU Direct Modbus TCP Master

YASKAWA Electric Corp. MEMOBUS SIO

MEMOBUS Ethernet OMRON Corp.

C/CV Series HOST Link CS/CJ Series Ethernet CS/CJ Series HOST Link

Hitachi Industrial Equipment Systems HIDIC H Series Ethernet HIDIC H Series

Matsushita Electric Works FP Series Computer Link SIO

KEYENCE Corp. KV-700/1000 Series CPU Direct Saia-Burgess Controls SAIA S-Bus SIO

Temperature Controllers

Yamatake Corp. Digital Controller SIO

RKC Instrument Temp. Controller MODBUS SIO

OMRON Corp. Temp. Controller CompoWay/F

Fieldbus Module PROFIBUS International

PROFIBUS DP Slave

Other Connections

Digital Electronics Corp. Memory Link General Ethernet (using D-Script)¹

¹Contact your local sales rep for availability.

15

	Barcode, 2D Readers & Printers							
	Manufacturer	Model	Туре	Comments				
	Aimex Corporation	BR-530RS	Pen	Requires BB-60 power supply				
rial	OPT Electronics	OPT-6125-RS	Touch Scanner (read width: 65mm)	Requires DC5300T for power				
Ser	Denso Co.	HC-36IITR	Touch Scanner (read width: 61mm)	Requires P-200 for power, also requires KRS-423-XF1K (from Sanwa Supply) connector cable				
	HHP	IT3800LR-12	Linear imager	Requires cable 42203758-03 (IT3800LR-12 Reader has been shown to work but is not fully tested)				
	Aimex Corporation	BR-530UK	Pen	Power supply not required				
	OPT Electronics	OPT-6125-USB	Touch Scanner (read width: 65 mm)	Power supply not required				
	Denso Co.	HC-36TU-K	Touch Scanner (read width: 61mm)	Power supply not required				
USB	HHP	IT5800	Hand-held Industrial Scanner	5800SR050-0F00 is complete with USB cable				
Š	Symbol	LS3408-FZ	Hand-held Industrial Scanner	Part #LS3408-FZ20005 needs cable CBA-U01-S07ZA				
	Epson	Stylus Photo R200	Inkjet printer	Use USB cable FP-US00 or commercial type				
	Epson	ECS/P24-J84(C)	Command printer	Use USB conversion cable IEE1284 (commercially available)				
	NEC	PC-PR201-PL	Command printer	Use USB conversion cable IEE1284 (commercially available)				

AGP3000 Connectivity and Installation Accessories



USB Transfer Cable (1m) CA3-USBCB-01 Downloads project data created with GP-Pro EX from PC's USB port to AGP's USB port.



USB Cable (5m) FP-US00 Connects a USB printer (Type B) port to AGP's USB port.



USB Front Cable (1m) CA5-USBEXT-01 USB extension cable.



RS-232 Cable (5m) CA3-CBL232/5M-01 Connects Mitsubishi PLC A-Series to the AGP RS-232 COM port.



GP RS-422 Cable (5m) CA3-CBL422-01 Connects the AGP RS-422 COM port 2 via 9-pin plug to host controller via open wires.



RS-422 Cable (5m) CA3-CBL422/5M-01 Connects the AGP RS-422 COM port 1 via 9-pin socket to host controller via open wires.



Omron PLC SYSMAC Link Cable (5m) CA3-CBLSYS-01 Connects Omron PLC SYSMAC Series unit to AGP RS-232C port.



Mitsubishi PLC A-Series Connection Cable (5m) CA3-CBLA-01 Connects Mitsubishi PLC A-Series and QnA-Series programming console port to AGP.



GP Multi-Link Cable (5m) CA3-CBLMLT-01 Connects a host controller to the AGP RS-422 port for multi-link (n:1) communication.



Cable (5m) CA3-CBLQ-01 Connects Mitsubishi PLC Q-Series programming console port to AGP. Connection cable.



Mitsubishi PLC Q-Series Cable (5m) CA3-CBLLNKMQ-01 Connects Mitsubishi PLC Q-Series to the AGP RS-232C COM port. Link cable.



Mitsubishi PLC FX-Series Cable CA3-CBLFX/5M-01 (5m) CA3-CBLFX/1M-01 (1m) Connects Mitsubishi PLC FX-Series programming console port to AGP RS-422 COM port.



9-pin-to-25-pin RS-232C Conversion Cable CA3-CBLCBT232-01 9-pin D-sub socket to 25-pin RS-232 cable adapter (for use with some HMI-CAB-Cxxx cables).



9-pin-to-25-pin RS-422 Conversion Cable CA3-CBLCBT422-01 9-pin D-sub socket to 25-pin RS-422 cable adapter (for use with some HMI-CAB-Cxxx cables).

RS-232C Cross-Type Cable

25-pin D-sub connector

both ends. Requires

CA3-CBLCBT232-01.

(5m)

GP410-IS00-0



Allen-Bradley SLC 5/03, 5/04 Series Cable HMI-CAB-ST52 HMI-CAB-ST52-30X HMI-CAB-ST52-50X Connects AGP3000/ST401 to A-B PLC via RS-232 9-pin D-sub.



Ethernet Crossover Cable HMI-CAB-ETH 6-ft. HMI to PLC Ethernet port or to program HMI.



GP 2 Port Adapter Cable (5m)

Connects Mitsubishi PLC to

the AGP RS-422 port using

2-port adapter II (GP070-

CA3-MDCB11

MD11).

Micrologix PLC Cable HMI-CAB-ST106 Connects AGP3000/ST401 to PLC RS-232 8-pin DIN port.

1-Amp Power Supply

2-Amp Power Supply

24VDC Din-Rail Mount Class

510-1000-004

510-1000-041

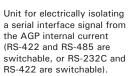
1 Div 2.



PLC Adapter Cable HMI-CAB-ST001 Connects to AGP3000/ ST40x serial port with 9conductor open-ended wires for connecting to third-party screw terminal devices.

RS-485 Isolation Unit CA3-ISO485-01

RS-232 Isolation Unit CA3-ISO232-01



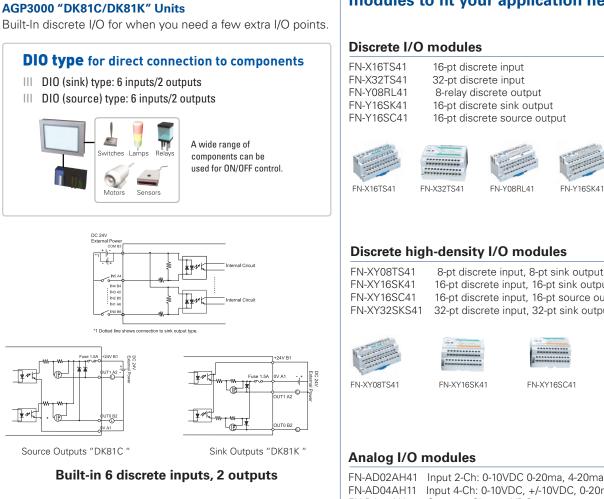
Serial USB Cable for Modem Download CA6-USB232-01

Protect Free Fre	Pro-Server EX Data Management Software EX-SDV-V10 (Includes one user license.) Additional User License EX-SED-LICENSE	Siemens COM Port Conversion Adapter CA3-ADPSEI-01 9-pin D-sub to MPI adapter. Adapts COM port to accept Profibus MPI-style connectors and cables.	COM Port Conversion Adapter CA3-ADPCOM-01 9-pin D-sub plug to 9-pin D-sub socket adapter for AGP3000 COM port 1. Not intended for AGP3302 model.	Online Adapter CA4-ADPONL-01 9-pin D-sub plug to 9-pin D-sub socket adapter for AGP3000 COM port 2 only. NOTE: Includes network pull- up/pull-down resistors. Not intended for AGP3302 model.
Aux connector CAS-AUX CONNECtor for AGP3000 series required in case an external output is used.	Terminal Block Conversion CA3-ADPTRM-01 9-pin male D-sub to screw terminal.	Witsubishi PLC A, OnA, FX Series 2-Port Adapter II GPO70-MD11 Allows simultaneous use of an AGP3000 Series unit and a Mitsubishi PLC A, OnA, FX series peripheral device.	DC Power Supply Connector for AGP330x and AGP34x0 models CA5-DCCNM-01	DC Power Supply Connector for AGP35x0 and AGP36x0 models CA5-DCCNL-01
Installation Fastener CA3-ATFALL-01 Used to install the AGP3000 Series into a solid panel (included with unit).	USB Cable Clamp (2-port) CA5-USBATL-01 USB cable clamp for 2-port HMI units to prevent disconnection.	USB Cable Clamp (1 port) CA5-USBATM-01 USB cable clamp for 1-port HMI units to prevent disconnection.	Panel Cutout Adapter for AGP3500 Series CA4-ATM10-01 Panel cutout adapter for mounting in cutout of GP2500 (TFT).	Panel Cutout Adapter for AGP3300 Series CA4-ATM5-01 Panel cutout adapter for mounting in cutout of GP37W2B.
PROFIBUS Slave Unit CA5-PFSALL/EX-01 PROFIBUS slave communication module for connecting AGP to PROFIBUS DP network.	CF Card Adapter GP077-CFAD10 Used for read/write of CF card data via a PC's PCMCIA slot.	CompactFlash card inserts into the unit's CF card slot. 128MB CA3-CFCALL/128MB-01 256MB CA3-CFCALL/256MB-01 512MB CA3-CFCALL/512MB-01	AGP3500T/AGP3550T Backlight Replacement CA5-BLU10T-01 AGP3750T Backlight Replacement CA3-BLU15-01 AGP3600T/AGP3650T Backlight Replacement CA3-BLU12-01 AGP3500S/GP2501S Backlight Replacement PS501S-BU00 Note: AGP3300, AGP3400 and AGP3500L backlights cannot be replaced in the field.	Protection Sheets Disposable, dirt-resistant cover for screen (5 sheets/set) 15" for AGP3750 series CA3-DFS15-01 12" for AGP3600 series CA3-DFS12-01 10" for AGP3500 series CA5-DFS10-01 8" for AGP3400 series PS400-DF00 6" for AGP3300 series CA3-DFS6-01

HMI Control With Integrated I/O

Expand the reach of your HMI operator interface

Need some extra I/O? Now there's no need to buy an extra controller when you just need a few more I/O points. The AGP3000 Series of HMI operator interfaces includes models that feature built-In discrete I/O. Or, expand to a distributed I/O network by choosing a model with the optional flex network interface. The choice is yours. Either way, you'll save money with these cost-effective options.



AGP3000 "FN1M" Units

Flex network interface for distributed I/O applications.

HMI Control for Distributed I/O

Flex network type featuring I/O expansion

III Maximum number of expandable I/Os: 512-bit I/Os (256 inputs and 256 outputs) 128 integral I/Os (64 inputs and 64 outputs)



Mix and match any flex network I/O modules to fit your application needs



FN-Y16SC4

8-pt discrete input, 8-pt sink output 16-pt discrete input, 16-pt sink output 16-pt discrete input, 16-pt source output

32-pt discrete input, 32-pt sink output



FN-XY32SKS41

Input 2-Ch: 0-10VDC 0-20ma, 4-20ma
Input 4-Ch: 0-10VDC, +/-10VDC, 0-20ma, 4-20ma
Output 2-Ch: 0-10VDC 0-20ma, 4-20ma
Output 4-Ch: 0-10VDC, +/-10VDC, 0-20ma, 4-20ma





FN-DA02AH41

With the AGP3000 family, you can create a complete HMI monitoring and control system in the same software development environment!

Our Commitment to You



Reliable operations worldwide

Pro-face products are known worldwide for their reliability, and they are just as reliable in your facility as they are everywhere else in the world. Our extensive certifications and global support network provide you complete peace of mind. Whether you're looking for HMI products for your own facility or for facilities around the world, Pro-face is there to serve you.



Committed to bringing you the best HMI products

No other HMI company will offer you more options, higher reliability or better investment protection than Pro-face. Pro-face strives to continually provide you with HMI products that have features you won't find anywhere else, like ultra-fast 64-bit RISC processors for unmatched HMI performance, the ultimate in multimedia and connectivity capabilities, plus integrated data management solutions and other features proven to boost your productivity and reduce your costs.

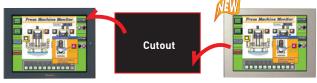
The best HMI protection money can buy.

Protecting your investment

If you're already a Pro-face customer, then you realize the investment protection we've built into our operator interfaces. No other operator interface company can offer you:

- 16 years of cutout compatibility
- Built-in HMI application software migration tools
- Continuous software and hardware enhancements •
- Local field application engineers ready to assist you
- A two-year warranty
- In-stock, next-day shipments

Drag out the old...drop in the new



Older GP2000. GP77R. GP70. GP*50, GP*30, and **GP*10** Series

AGP3000 Series

Panal autout dimonsions

Panel cutout dimensions							
Size (mm) Series name	191.5x141.5	156x123.5	204.5x159.5	259x201	301.5x227.5	383.5x282.5	
GP77R Series	GP-37W2B	GP377R Series	_	GP-477RE	GP577R Series	—	
GP2000 Series	-	GP230* Series	GP240* Series	—	GP260* GP250* Series	_	
GP3000 Series	GP-3300 Series		GP-3400 Series	GP-3500 Series(TFT)	GP-3600 GP-3500(STN) Series	GP-3700 Series	

Note: In some instances, an available adapter plate may be required.



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BR-GP3-001(B)

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Pro-face Operator Interfaces





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

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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 visability.
- UL Listed, Class 1, Division 2 hazardous location certifications.

COMMUNICATION

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

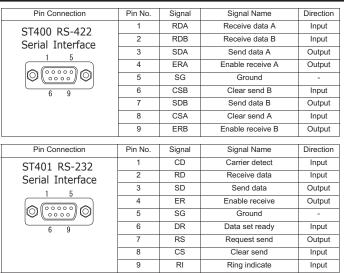
INFORMATION



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.

CONNECTIVITY



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.





Partial List of Controllers Supported:

GE Fanuc	Коуо
Schneider	Omron
Fuji Electric	Rockwell
Modicon	Siemens
Mitsubishi	Matsushita
Yokogawa	Toyoda and MORE

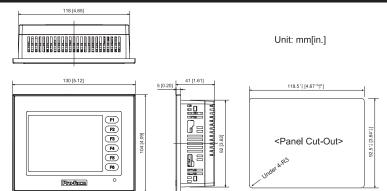
ST400 & ST401 SPECIFICATIONS

FUNCTIONAL SPECIFICA	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

UEI	NERAL SPECIFICATIO	
cal	Input Voltage	24VDC
Electrical	Rated Voltage Range	19.2VDC to 28.8VDC
Ele	Power Consumption	7W or less
_	Ambient Operating Temp.	0°C to 50°C (Cabinet interior and panel face)
nta	Storage Temperature	-20°C to 60°C
nmental	Operating Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
iror	Storage Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
Envi	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 80 min.)
a	Ratings	NEMA TYPE#250 Type 4 $x/12$ Equivalent to IP65 (Indoor use only)
ura	Certifications	UL/cUL Listed, UL508, UL1604 CL 1 Div 2, CE EN55011, EN61000-6-2
uctur	External Dimensions	W130mm[5.12in.] x H104mm [4.09in.] x D41mm [1.61in.]
Str	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

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

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*

Customer Support Hotline: 734-944-0482



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ST401 12VDC, RS-232 Serial

3.8" Amber Low Cost Graphic Touch Screen

- Fast and Powerful 100Mhz RISC Processor
- Six function buttons configurable per screen
- HMI designed for solar-powered remote flow monitoring applications
- 12V DC is ideal for in-vehicle heavy machinery display systems
- Bar code reader support for parts tracking and inventory control
- Extensive Multi-language character support •
- Zero maintenance amber LED backlight ideal for applications needing high contrast and visibility
- UL Listed, Class 1, Division 2 Hazardous Location Certifications

FEATURES

- 3.8 Inch Touch Screen
- LED Backlit Amber LCD
- 320 x 240 QVGA Resolution
- Graphic Image Import

RS-232 Serial Com Port

Java-Based Scripting Support

- NEMA 4x/12
- 12V DC Power
- Multi-language

INFORMATION



Powered by Pro-Designer V4.2.10 HMI **Development software**

- · Easy-to-use multi-platform graphics editor for drawing objects, animation, creating preconfigured operator objects, etc.
- Recipes Trending, Alarm/Event Management, Security, Scheduling, Pop-up keypads, etc.
- Animation and Java-based scripting
- Graphic file import: BMP, JPG, EMF, PNG

COMMUNICATION

Versatile interfaces support flexible and expanding control system needs:

Connect to various controllers via RS-232



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





CONNECTIVITY

Pin Connection Pin No Signal Signal Name Direction NC No connection 1 NC No connection 2 LINE(+) In/Output 3 Line (+) RTS Request Send Output 4 <u>....)</u>0 5 SG Ground 6 5V 5V External Output Output 6 7 NC. No connection 8 LINE(-) Line (-) In/Output No connection NC The connector of the ST side is socket type *1

*2 When providing power via the Seimens Corporation Profibus connector, power cannot be connected to the Device/PLC



Partial List of Controllers Supported:

		and MORE
Modicon	Omron	Toyoda
Fuji Electric	Коуо	Matsushita
Schneider	Yokogawa	Siemens
GE Fanuc	Mitsubishi	Rockwell

RS-232C Serial Interface

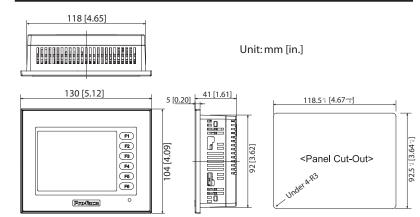
ST401 12V SPECIFICATIONS

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	st 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	8 MB FLASH EPROM			
Memory - Data Backup	16MB SRAM - uses a lithium battery			
Serial (COM 1) Interface	RS-232C, 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

Gal	Input Voltage	12VDC
Electrical	Rated Voltage Range	9.6VDC to 14.4VDC
Ele	Power Consumption	7W or less
_	Ambient Operating Temp.	0°C to 50°C (Cabinet interior and panel face)
inte	Storage Temperature	-20°C to 60°C
nmental	Operating Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
iror	Storage Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)
Envi	Vibration Resistance	IEC61131-2 (JIS B 3501) compliant. When vibration is NOT continuous: 10Hz to 57Hz 0.075mm, 57Hz to 150Hz 9.8m/ s2. When vibration is continuous: 10Hz to 57Hz 0.035mm, 57Hz to 150Hz 4.9m/s2 X,Y, Z direction for 10 times 80 min.)
a	Ratings	NEMA TYPE#250 Type 4 x/12 Equivalent to IP65
iura	Certifications	UL/cUL Listed, UL508, UL1604 CL 1 Div 2, CE EN55011, EN61000-6-2
.uct	External Dimensions	W130mm[5.12in.] x H104mm [4.09in.] x D41mm [1.61in.]
Str	Weight	0.4kg (0.88lb) or less

EXTERNAL DIMENSIONS



SOFTWARE COMPATIBILITY



Powered by Pro-Designer V4.2.10 HMI Development software

ORDERING INFORMATION

ORDER NUMBER

ST401-AG41-12V-XY1

OPTIONAL ACCESSORIES

GPW-CB02 GPW-CB03 CA3-CBL232/5M-01 HMI-CAB-ST001 ST400-DF01 PLC Cables

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

DESCRIPTION

3.8" Amber, Pro-Designer Only, 1 RS-232 Port, 12VDC

Programming Cable, PC RS-232, 9 pin D-Sub application download cable Programming Cable, PC USB, application download cable RS-232C cable, 5 meter length, connect ST401 unit to PLC via 25 pin, D-sub plug Generic serial communication cable, ST40x to open end wires, 3 meters Overlay Screen Protection Sheet (qty 5) *Wide variety of PLC cables available*

Customer Support Hotline: 734-944-0482



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Pro-face Operator Interfaces



Six Function Keys

24V DC Power

Multi-language



ST402-AG41-24V (Ψ) (Ψ)

FEATURES

- 3.8 Inch Touch Screen
- LED Backlit Amber LCD
- 320 x 240 QVGA Resolution

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.

CONNECTIVITY



Siemens MPI RS-485 Serial Interface

Pin Connection	Pin No.	Signal	Signal Name	Direction	
	1	NC	No connection	-	
	2	NC	No connection	-	
5 1	3	LINE(+)	Line (+)	In/Output	
6	4	RTS	Request Send	Output	
\bigcirc	5	SG	Ground	-	
9 6	6	5V	5V External Output ^{*2}	Output	
*1	7	NC	No connection	-	
	8	LINE(-)	Line (-)	In/Output	
	9	NC	No connection	-	
*1 The connector of the ST side is socket type.					

1 The connector of the ST side is socket type

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
- 15-Level Password Security
- Siemens MPI 485 Com Port
- Secondary RS-422 (Limited) Serial Port

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



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
1 5	3	SDA	Send data A	Output
· · · · · · · · · · · · · · · · · · ·	4	ERA	Enable receive A	Output
\bigcirc (\cdots) \bigcirc	5	SG	Ground	-
6 9	6	CSB	Clear send B	Input
	7	SDB	Send data B	Output
*1	8	CSA	Clear send A	Input
	9	ERB	Enable receive B	Output

*1 The connector of the ST side is pin type. <u>Note</u>: 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 Monochrome; up to 8 levels of gray **Display Colors** Backlight LED backlight; maintenance free **Display Resolution** 320 x 240 pixels W76.7mm [3.02in.] x H57.5mm [2.26in.] Effective Display Area (mm) Brightness Control 2 levels of adjustment available via touch panel 8 levels of adjustment available via touch panel Contrast Control 8x8, 8x16, 16x16, 32x32 dot fonts Character Sizes Width can be expanded 1 to 8 times. Height can be expanded 1/2 and 1 to 8 times Font Sizes 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 Tranmission 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** Input Voltage 24VDC Electrical Rated Voltage Range 19.2VDC to 28.8VDC **Power Consumption** 7W or less 0°C to 50°C (Cabinet interior and panel face) Ambient Operating Temp. tal Storage Temperature -20°C to 60°C Environmen **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) Vibration Resistance IEC61131-2 (JIS B 3501) compliant. When vibration is NOT continuous: 10Hz to 57Hz 0.075mm, 57Hz to150Hz 9.8m/s2-When vibration is continuous: 10Hz to 57Hz 0.035mm, 57Hz to 150Hz 4.9m/s² X,Y, Z direction for 10 times (80min.) Ratings NEMA TYPE#250 Type 4 x/12 Equivalent to IP65 Structural UL/cUL Listed, UL508, UL1604 CL 1 Div 2, CE EN55011, EN61000-6-2 Certifications

W130mm[5.12in.] x H104mm [4.09in.] x D41mm [1.61in.]

EXTERNAL DIMENSIONS

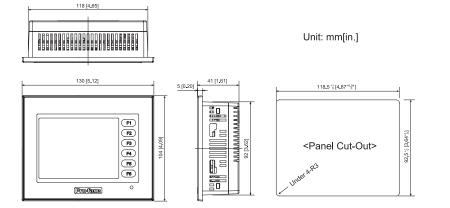
External Dimensions

Weight

SOFTWARE COMPATIBILIT

GP-PRO C-Package 03 HMI

Development software



0.4kg (1.1lb) or less

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

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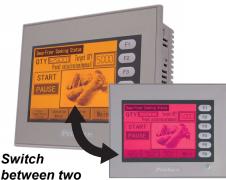
Customer Support Hotline: 734-944-0482



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Pro-face Operator Interfaces





ST403 - Ethernet & RS-232/RS-422

3.8" Amber/Red Low Cost Graphic Touch Screen

- Fast and Powerful 100Mhz RISC Processor
- · Six function buttons configurable per screen
- Both Ethernet and RS-232/RS-422 communications
- Simultaneous multi-protocol support using Pro-Designer software
- · Bar code reader support for security systems and inventory control
- · Extensive Multi-language character support
- UL Listed, Class 1, Division 2 hazardous location certifications
- Data sharing connectivity to Microsoft programs using Pro-Server software

FEATURES

colors!

- 3.8 Inch Touch Screen
- LED Backlit Amber/Red LCD

ST403-AG41-24V

() (U) (U) (U)

320 x 240 QVGA Resolution

INFORMATION

Various HMI software solutions available to match your needs:



- Advanced featured Graphics Editor for drawing objects, animation, creating preconfigured operator objects, scripting, etc.
- Recipes Trending, Data Logging, Alarm/Event Management, Security, etc.
- Software application connectivity via OPC, DDE, SQL, DLL, SMTP Email
- Graphic file import: BMP, JPG, EMF, PNG
- Optional Web-enabled browser features

CONNECTIVITY



RS-232 / RS-422 Serial Interface

Pin Connection	Pin No.	Signal	Signal Name	Direction
	1	CD/RDA	Carrier detect /Receive data A	Input /Inpu
	2	RD/RDB	Receive data /Receive data B	Input /Input
	3	SD/SDA	Send data/Send data A	Output /Output
$\underbrace{\bigcirc \underbrace{\begin{pmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 &$	4	ER/ERA	Enable receive /Enable receive A	Output /Output
	5	SG/SG	Ground/Ground	-
	6	DR/CSB	Data set ready/Clear send B	Input /Input
	7	RS/SDB	Request send /Send data B	Output /Output
	8	CS/CSA	Clear send/Clear send A	Input /Input
	9	RI/ERB	Ring indicate /Enable receive B	Input /Output

• Ethernet Port (10baseT)

- Data Sharing via Pro-Server
- Six Function Keys 24V DC Power
- RS-232/RS-422 Com Port Configurable
 Multi-language

COMMUNICATION

Versatile interfaces support flexible and expanding control system needs:

Connect to various controllers via Ethernet or serial interfaces





Temperature Controller

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





Partial List of Controllers Supported:

GE Fanuc Series 90-30 Series 90-70 PowerMate (Motion Controller) Fanuc Series 16, 18, 16i, 18i, 21i

Schneider

Twido Ouantum Momentum Micro & Nano

Mitsubishi MELSEC-A MELSEC-FX MELSEC-Q MELSEC-QNA

Rockwell SLC500 MicroLogix ControlLogix CompactLogix

Koyo DL205, 305, 405 Siemens Simatic-S5 Simatic-S7-200, 300, 400

IDEC

Micro & MicroSmart

Yokogawa

Matsushita

Fuji Electric

AND MORE

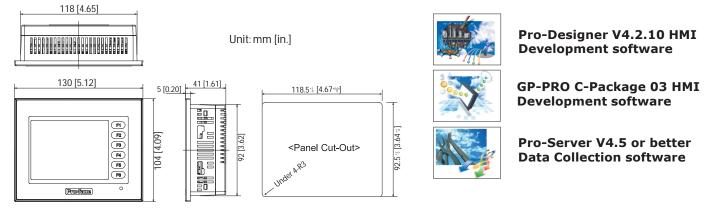
ST403 SPECIFICATIONS

FUNCTIONAL	SPECIFICATIONS

ГЧ	FONCTIONAL SPECIFICATIONS					
Dis	splay Type	Monochrome LCD				
Display Colors		Monochrome up to 8 levels of gray				
Ва	cklight	LED backlight (Amber or Red color) maintenance free				
Dis	play Resolution	320 x 240 pixels				
Eff	ective Display Area (mm)	W76.7mm [3.02in.] x H57.5mm [2.26in.]				
Bri	ghtness Control	2 levels of adjustment available via touch panel				
Co	ntrast Control	8 levels of adjustment available via touch panel				
Ch	aracter Sizes	8x8, 8x16, 16x16, 32x32 dot fonts				
Fo	nt Sizes	Width can be expanded 1 to 8 times. Height can be expanded 1/2 and 1 to 8 times				
Me	mory - Application	640 KB FLASH EPROM				
Me	mory - Data Backup	96 KB SRAM - uses a lithium battery				
Se	rial (COM 1) Interface	RS-232C/RS-422 configurable, 9-pin D-sub, Data Transmission Speed: 2400 to 115.2 kbps				
Etł	nernet Interface	IEEE802.3, 10BASE-T				
То	ol Connector Port	8-pin Din, Asynchronous TTL Level non-procedural command interface for program download, bar code reader interface				
GENERAL SPECIFICATIONS						
Electrical	Input Voltage	24V DC				
ŝctri	Rated Voltage Range	19.2VDC to 28.8VDC				
Ĕ	Power Consumption	7W or less				
	Ambient Operating Temp.	0°C to 50°C (Cabinet interior and panel face)				
tal	Storage Temperature	-20°C to 60°C				
ner	Operating Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)				
uuc	Storage Humidity	10%RH to 90%RH (non-condensing, drybulb temperature: 39°C or less)				
Environmental	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 (Indoor use only)				
Iral	Certifications	UL/cUL Listed, UL508, UL1604 CL 1 Div 2, CE EN55011, EN61000-6-2				
Structural	External Dimensions	W130mm[5.12in.] x H104mm [4.09in.] x D41mm [1.61in.]				
Stn	Weight	0.4kg (0.88lb) or less				

EXTERNAL DIMENSIONS

SOFTWARE COMPATIBILITY



ORDERING INFORMATION

ORDER NUMBER	DESCRIPTION
ST403-AG41-24V	3.8" Dual Color Amber/Red LED, Ethernet and RS-232/RS-422 Port, 24V, UL, CE
OPTIONAL ACCESSOR	I <u>ES</u>
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-ETH	Ethernet crossover cable, 6 ft. length
HMI-CAB-ST001	Generic serial communication cable, ST40x to open end wires, 3 meters
ST400-DF01	Overlay Screen Protection Sheet (qty 5)
PLC Cables	Wide variety of PLC cables available
Xycom Automation	

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Customer Support Hotline: 734-944-0482



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5.7" Operator Interface with RS-232/RS-422 Serial Port Connectivity

GP37W2-BG41-24V touch screen operator interface is supported wth Pro-face's full-featured GP-PRO 03 HMI development software. HMI unit includes one RS232/RS422 serial communication port for direct connection to PLC's, temperature controllers, inverters, and other various serial devices. A program download tool port that doubles as a bar code reader input port during runtime operation is also included. Interface to your custom controller using GP-Pro 03 scripting language and write your own simple ASCII

GP37W3-BG41-24V touch screen operator interface includes additional application memory to work specifically with Pro-face's multi-platform Pro-Designer HMI development software. The unit includes one

RS232/RS422 serial communication port in addition to the program download tool port that doubles as a bar

code reader input port during operation. This unit is ideal for basic graphical HMI applications such as monitoring environmental chambers, tank levels, machine on/off status, part tracking, system event monitoring,

Low Cost HMI

protocol.

heat treating etc.



GP37W2-BG41-24V (GP-PRO 03 Compatible) GP37W3-BG41-24V (Pro-Designer Compatible)

FEATURES

- 5.7 Inch Touch Screen
- 8-Shade Blue/White LCD
- 320 x 240 Resolution

INFORMATION

Powerful secure data collection and sharing



Various HMI software solutions available to match your needs:

- Advanced featured Graphics Editor for drawing objects, animation, creating pre-configured operator objects, scripting, etc.
- Recipes Trending, Data Logging, Alarm Event/ Management, Security, etc.
- · Multi-level security password features
- Graphic file import: BMP, JPEG, EMF, PNG
- Time-scheduler for production shift monitoring

• UL, cUL, CE Certifications

- RS-232/422 Com. Port Configurable
- Wide-Ranging DC Power

- Bar Code Reader Support
- Multi-Language Support
- NEMA 4x/12 Rated

SELECTION GUIDE

FEATURE	GP37W2- BG41-24V	GP37W3- BG41-24V
RS-232/RS-422 Com Port 25-pin D-sub	1	\checkmark
Bar Code Reader Support	√	√
UL Class 1 Div 2 Approved		√
Multi-Language Support	√	√
GP-Pro 03 Compatible	√	
Pro-Designer Compatible		\checkmark
Larger Application Memory		\checkmark

CONNECTIVITY: LARGEST SELECTION OF PROTOCOLS AVAILABLE!

Supports over 76 different PLC and motion controller protocols:

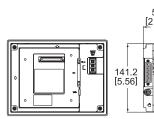
Host controller		GE Fanuc Series 90-30 Series 90-70 PowerMate (Motion Controller)	Schneider Twido Quantum Momentum	IDEC Micro MicroSmart
0001 0ch	Data inquiry	Fanuc Series 16, 18, 16i, 18i, 21i	Micro & Nano 984/884	Yokogawa
PLC 0079 tch 2ch 3ch		Siemens Simatic-S5	Mitsubishi	Matsushita
4ch		Simatic-S7-200, 300, 400	MELSEC-A MELSEC-FX	Fuji Electric
I/O memory table	Response	Rockwell SLC500	MELSEC-Q MELSEC-QNA	
		Control Logix MicroLogix Compact Logix	Koyo DL205, 305, 405	AND MORE

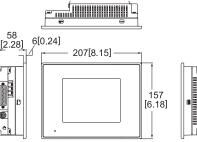
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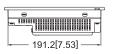
GP3	7W2/W3 SPE	CIFICATIONS
FUNCT	IONAL SPECIFICATIO	NS
Model		GP37W2-BG41-24V GP37W3-BG41-24V
Display	Туре	Blue-mode LCD (Blue/White)
	Backlight	CCFL (Service life: 25,000 hrs. at 25 degrees Celcius and 24 hr. operation)
	Resolution	320 x 240 pixels
	Effective Display Area	(W)115.2mm [4.53in.] x (H)86.4mm [3.4in.]
	Brightness Control	8 levels of adjustment available via touch panel
Memory	Application	1 MB FLASH EPROM 4 MB FLASH EPROM
Interface	Serial Interface	Asynchonous: RS-232C/RS-422, Data length: 7 or 8 bits, Stop bit: 1 or 2 bits, Parity: none, odd or even, Transmission Rate: 2400 to 115.2Kbps
	Tool Port	8-pin mini Din for programming/bar code reader
GENER	AL SPECIFICATIONS	
Electrical	Rated Voltage	24VDC
	Rated Voltage Range	20.4VDC to 27.6VDC
	Power Consumption	20W or less (TYP 10W)
Environmental	Ambient Operating Temp.	0°C to 50°C
	Storage Temperature	-20°C to 60°C
	Storage Humidity	20%RH to 85%RH (non-condensing)
	Vibration Resistance	10Hz to 25Hz (X, Y, Z directions for 30 minutes at 19.6ms ²)
Structural	Ratings	(For front panel of installed unit) Equivalent to IP65f, Nema #250 Type 4x/12
	External Dimensions	W207mm[8.15in.] x H157mm [6.18in.] x D58mm [2.28in.] (main unit only)
	Weight	1.1kg (2.4lb) or less (main unit only)

EXTERNAL DIMENSIONS

Unit: mm [in.]







SOFTWARE COMPATIBILITY



GP-PRO C-Package 03 HMI Development software (For GP37W2-BG41-24V)



Pro-Designer 4.2.10 HMI Development software (For GP37W3-BG41-24V)

ORDERING INFORMATION

ORDER NUMBER

DESCRIPTION

GP37W2-BG41-24V GP37W3-BG41-24V 5.7" Blue/white touch screen, 24V DC powered serial HMI 5.7" Blue/White Pro-Designer ready, 24V DC powered serial HMI

OPTIONAL ACCESSORIES

GPW-CB02Programming cable: PC RS-232, 9-pin D-sub application download cableGPW-CB03Programming cable: PC USB, application download cableGP070-AT01Installation Fasteners (included with unit)GP37W2-DF00Protective Hard Type Sheet (5 per pack)

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