

Pro-face

for the best interface

HMI Solutions

Visualization and Data Management Software



Contents

About Pro-face

Multi-platform HMI Solutions

Easy HMI solutions at your Fingertips

Application Simulation

Decrease Start-up and Application Troubleshooting

Operation Security

Operator Safety and Project Security

Field Maintenance

Low Cost Field Upgrades

Remote Access and Support

Maintaining HMIs via Internet

Easy Data Sharing

Integrate into MRP, MES, ERP Business Systems

CELEBRATING

35+ Years

of Industrial
Automation
Solutions

About Pro-face

Pro-face

for the best interface



Delivering More...

We are the leading independent global supplier of visualization and data management solutions for industrial applications.

We continue to set the standards for industrial solutions by offering the industry's most extensive product offerings and the highest levels of connectivity and support.

Pro-face: A Company You Can Depend On

- More than 35 years providing industrial Human Machine Interface (HMI) technology
- Pro-face is the most trusted name in the industry
- Worldwide applications support teams ready to help you
- Serving more than 50 countries, Pro-face has 17 main offices with 1200+ employees
- We speak your language:
English, Spanish, Portuguese, Japanese
- We have a vast distribution network to provide products quickly anywhere



Pro-face®

Operator Interfaces, Industrial PCs & Monitors

Innovation

Value

Service

Why Choose a Pro-face HMI Solution?



Delivering Total Confidence



Choose Pro-face and make this your last HMI conversion.

One HMI Environment

- √ Easy, full-featured HMI development
- √ Multi-platform operator interfaces (Windows-based and dedicated OI supported)
- √ 100% tested 3rd party connectivity
- √ Free application example projects
- √ Factory to office data connectivity

Service and Support

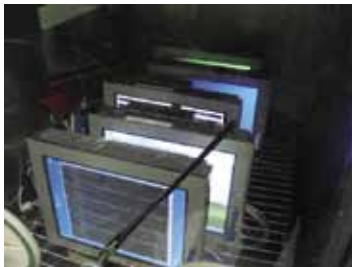
- √ No service/support contracts
- √ 24/7 online knowledge center
- √ Free HMI learning center
- √ Proof-of-concept support
- √ 5 day repair turnaround

Investment Protection

- √ 20+ years cutout compatibility
- √ 15+ years software migration
- √ 7+ years service policy
- √ 100% product documentation
- √ Globally certified

Delivering Performance

Extensive product testing, highest quality components and global certifications guarantee years of reliable service and performance. Our products are serviced and supported around the globe.



EMI Immunity Testing



Temperature/Humidity Cycling Testing



Vibration Resistance Testing



Restriction of Hazardous Substances (RoHS) is a directive of the European Union (EU).

ISO 9001:2000
Quality System Certified

ISO 14000
Environmental Management Certified

Tested Certified Dependable

HMI Solutions At Your Fingertips

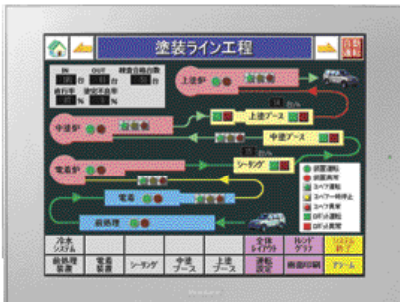
If You Want....

- ✓ Intuitive HMI Development
- ✓ Application Flexibility
- ✓ Easy Data Integration
- ✓ Straightforward Solutions

Then You Need...



Pro-face EX Visualization Solutions



Easy as 1, 2, 3

- 1 Choose Your Platform
- 2 Select Your HMI
- 3 Create Your Screens

Pro-face EX Has Its Rewards

- ✓ Plant HMI Standardization
- ✓ Factory to Office Connectivity
- ✓ Remote Internet Maintenance
- ✓ Data Reporting / Monitoring
- ✓ Security, Safety, Training

Easy Solutions - Impressive Results

Our Latest Enhancements

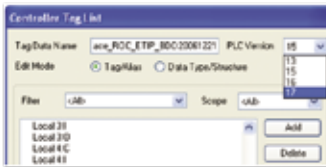
More Features, More Functions, More Connectivity



High Brightness HMI Support

AGP3000 U Operator Interfaces

- ✓ Visibility in high brightness areas
- ✓ 800 and 1000 Nit rated displays
- ✓ 6" and 12" models available



Enhanced AB Native Tag L5K

Ultra Easy Import Of Your L5K Tags

- ✓ RSLogix 5000 V13 and higher support
- ✓ Pre-defined structures support
- ✓ Module Defined Structures support
- ✓ Enhanced Tag Database Management

Date	Time	ID	Level	Action	Added Into
11/03/2009	9:28:21	Oper01	5	Login	Carl R
11/03/2009	9:28:28	Oper01	5	Scan Ony	Carl R
11/03/2009	9:28:47	Oper01	5	Hit Set	Carl R
11/03/2009	9:29:05	Oper01	5	Logout	Carl R
11/03/2009	10:31:08	Oper02	8	Login	Steve V
11/03/2009	10:31:27	Oper02	5	Data Set	Steve V
11/03/2009	10:31:45	Oper02	5	Logout	Steve V
11/03/2009	10:46:07	ShiftSupr	10	OpLog	Tom E

Operation Log Data Entry

Append Data To Operation log For Clarity

- ✓ Identify actions taken by employee
- ✓ Append data to log based on bit trigger
- ✓ Append results based on actions taken



Your Choice of Fonts

Match Your Corporate Standards

- ✓ Proportional True Type Fonts
- ✓ Fixed Width True Type Fonts
- ✓ Multi-language True Type Font Support.



New Manual Format

Quick Reference Machine Documents

- ✓ Windows format Help files
- ✓ Searchable files for quick reference
- ✓ Store documentation within your HMI



Large HMI Application Support

15" AGP3750 User Memory Selection

Create large highly detailed HMI projects with optimized performance using the "Increased Drawing Capacity" memory selection. This option increases memory capacity by disabling the Multimedia functions.



"Other Format" Symbol Import

CSV Import RSView Studio and Others

- ✓ Import any CSV-based tag export file
- ✓ Import RSView Studio tag CSV file
- ✓ Minimize manual tag data entry



Siemens STEP7 Symbol Import

Save Time Importing Siemens Symbols

- ✓ Retrieve Symbols in Siemens S7 files
- ✓ Import Symbols in projects and Symbol Declarations in data blocks



Array Enhancements

Use in Bit and Word Address Symbols

- ✓ Easy creation for a variety of arrays
- ✓ More flexibility of on screen messages

The Smartest and Easiest HMI Software Available

Your Choice of Platform



Screen Editor

GP-Pro EX

One HMI Development Software



HMI+



Dedicated HMI

Dedicated Operator Interfaces

AGP3000 Series

Touch Screen Displays with extensive simultaneous multi-protocol connectivity. The HMI to use for data sharing and data acquisition applications. Includes, CF, video, Ethernet, serial and USB connectivity.



AGP3000 SERIES

AST3000 Series

Touch Screen Displays with standard features to support standalone machine applications. Includes serial and USB connectivity.



AST3000 SERIES

HMI Plus Control All-in-One

LT 3000 Series

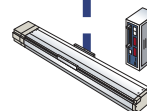
HMI with integrated logic control and touch display. A cost effective approach for stand alone machines.



LT3000 SERIES



Drives



Motion Controllers



Temperature Controllers

Integration Made Easy



Control

Open HMI



Industrial Computers Open HMI*

Full line of high reliability Industrial Panel mount computers for factory floor applications, hazardous environments, vision systems, intensive data capture.



APL3000 SERIES
High Performance Core Duo IPCs



PS3000 SERIES
Standard Performance IPCs

*Requires WinGP Software Runtime for GP-Pro EX created applications



Scanners



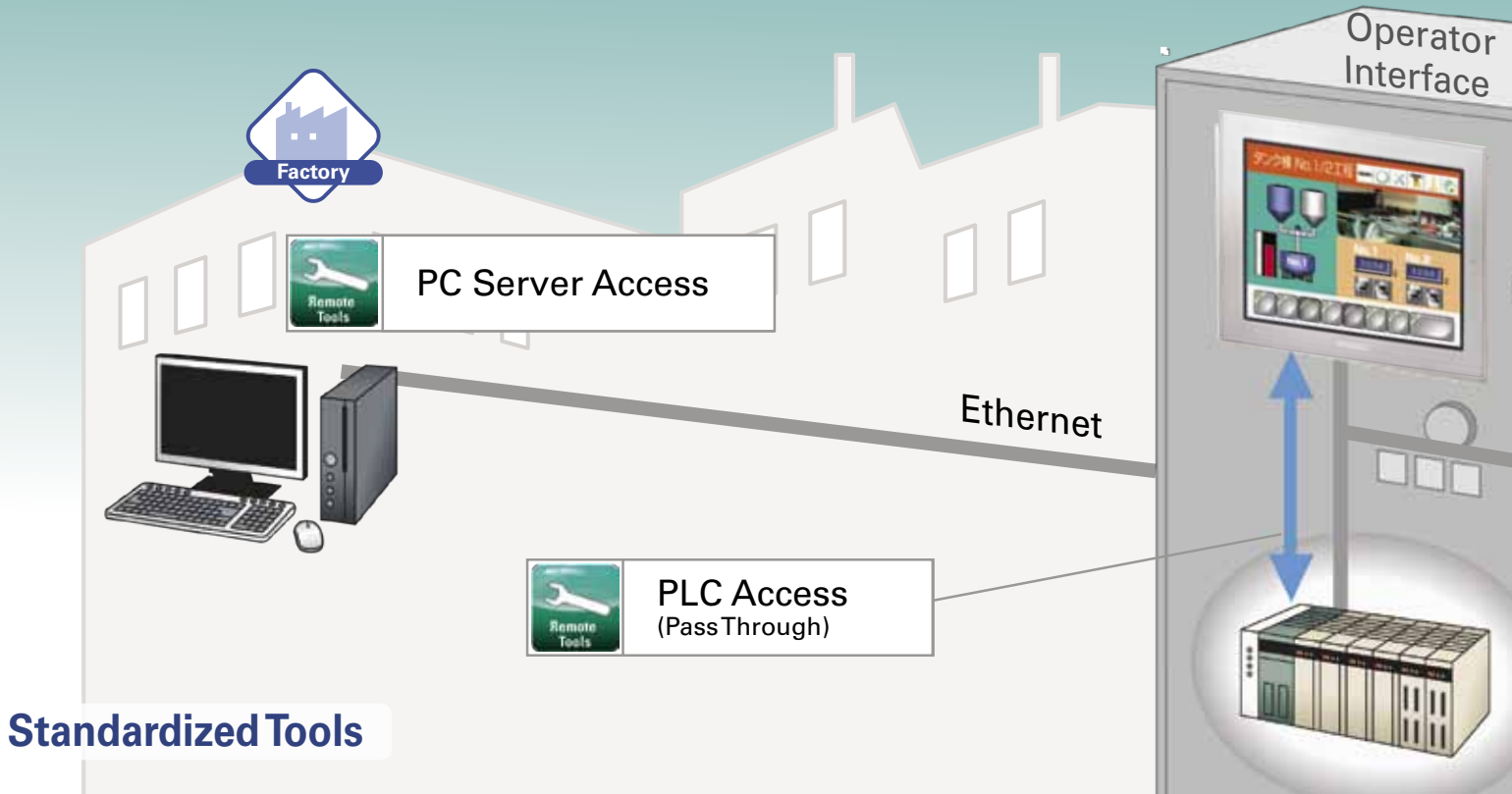
PLCs



Vision Systems




With Your Choice of Connectivity

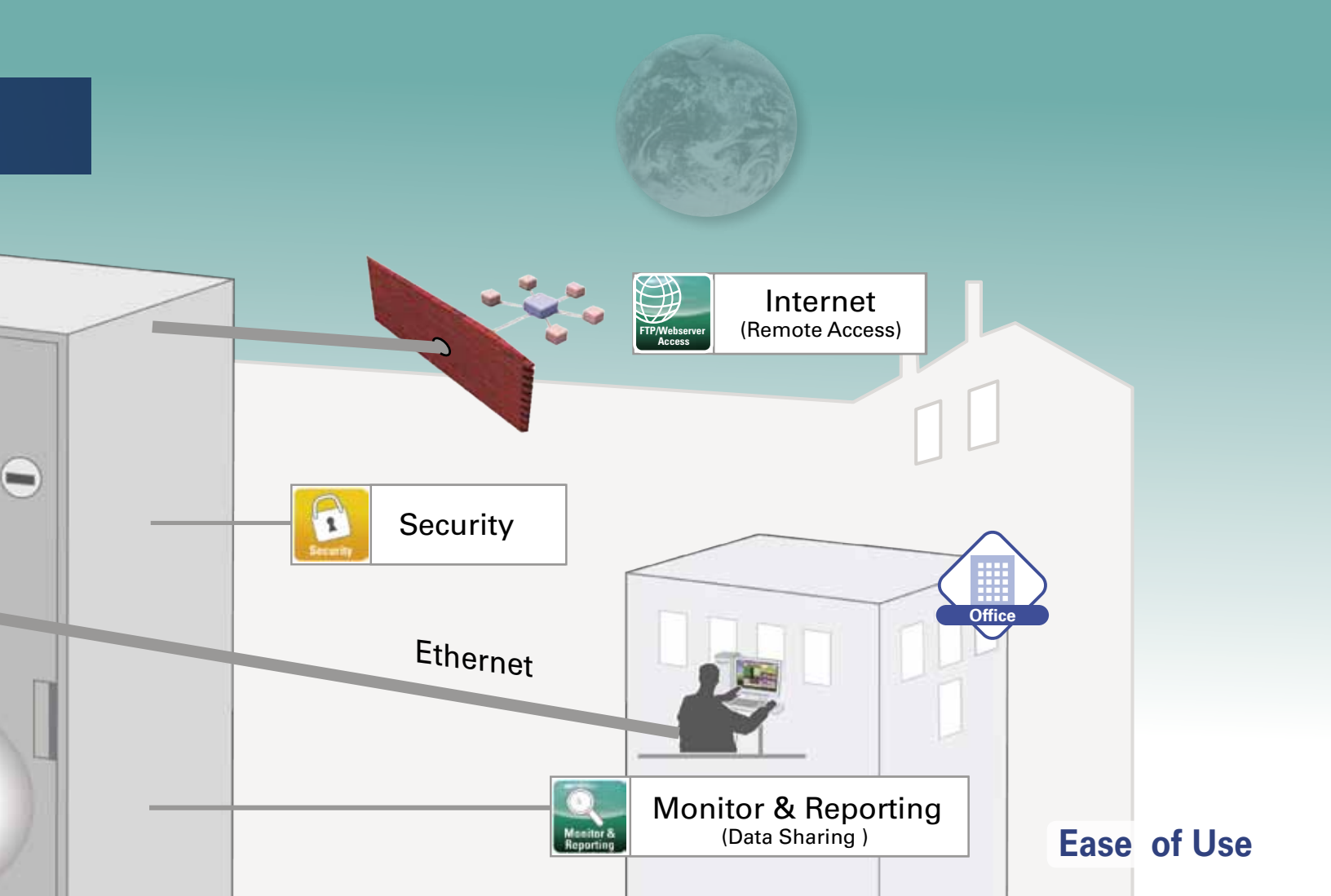
Solutions At Your Fingertips



Standardized Tools




Delivering More Value - Inn

 HMI Development	 Simulation	 Security
<p>GP-Pro EX Software</p> <p>A Premier HMI Development Software that Supports Dedicated and Open HMI (PC-based) solutions. One Software package saves money and development time.</p> <p>Rich Functionality delivers tools to cut application design time significantly. Features such as built-in logic programming, video support, and extensive 3rd party connectivity.</p> <p>Remote Support tools are included that lower maintenance and support costs. Maintenance can be done with or without a PC on site.</p> <p style="text-align: right;">PG 10</p>	<p>Testing and Debugging</p> <p>Simulation is an integral part of GP-Pro EX. Why wait to be in front of a customer before knowing how the HMI application will perform?</p> <p>Test before you connect The simulation feature creates a virtual HMI environment on your PC. It allows you to press buttons, enter values and monitor application behavior.</p> <p>Off-site Diagnostics is a great use of the simulation tool. OEMs and System integrators will find this invaluable as they attempt service and support at the end-user site.</p> <p style="text-align: right;">PG 19</p>	<p>Protection and Safety</p> <p>A wide variety of security features are built into GP-Pro EX development software. The developer can employ multiple methods to secure their application.</p> <p>Intellectual Property Rights protection is built into GP-Pro EX. You can secure and protect access to sensitive application information on a per part, per screen or entire HMI application.</p> <p>Safety for Machine Operators can be managed by limiting access to key maintenance functions or prevent unauthorized operational changes.</p> <p style="text-align: right;">PG 20</p>



Ease of Use

novation - Security

 Maintenance	 Remote Access	 Data Sharing
<p>Easy Field Updates</p> <p>Looking for a solution to perform updates without the need for a PC on site or even the development software? We have your solutions right here.</p> <p>Multiple Machine updates are easy using a USB memory stick to upgrade operator interface with new performance enhancements. Easy enough that your customer can upgrade their HMI.</p> <p>Lower your Operational Costs The remote maintenance tools provide different methods to perform machine maintenance. Choose what works for you.</p> <p style="text-align: right;">PG 22</p>	<p>Remote Support</p> <p>Select the right tool that meets the application need. Access, monitor, control and upgrade the HMI over the internet. Full service and support functionality.</p> <p>Reduce On-Site Travel using tools to extract log files, alarm history or update recipes and new security parameters. Even get access to your PLC for updates. Work from your home office.</p> <p>Alarms via RSS Feeds are received from HMIs in different locations. This benefit allows you to prioritize daily machine maintenance activities.</p> <p style="text-align: right;">PG 24</p>	<p>Pro-Server EX Software</p> <p>Expand your machine's performance using Pro-server EX to provide data connectivity and reporting functionality. Get the right information to the right people.</p> <p>Powerful Data Connectivity allows HMI to share information from machine to machine or to the corporate offices. This includes data that may be difficult to share using your PLC.</p> <p>Business System Integration such as an MRP, MES, ERP system is easy with the variety of different connectivity interfaces available. Check them out!</p> <p style="text-align: right;">PG 28</p>



Screen Editor

GP-Pro EX

GP-Pro EX

One development software for both dedicated and open windows-based operator interfaces.

Individual functions can be selected at a glance using these icons.

Created screens can be visually selected using the thumbnail view.

A screen call menu can be displayed. If you activate the screen call function while creating a screen, the called screen is moved below, and displayed as a thumbnail.

The editing screen provides a user interface that adopts many tabs.



Various graphs such as trend graphs can be placed on the screen.

Your search can be narrowed to select a most suited image parts.

Frequently-used functions can be assigned to function keys, making mouse-free editing possible.

Creating great HMI applications doesn't have to be hard. Intuitive Self-Guiding HMI Software

Four Easy Steps

1. Set up communications

- Choose and set up PLC and third-party devices effortlessly
- System settings are logically arranged and easy to find

2. Design application/screens

- Drag-and-drop addressing, parts and colors
- Efficient features to reduce development time
- Create consistent look and feel using the user-defined templates

3. Simulate and test

- Verify before you travel
- Debug your application without hardware
- Test without downloading

4. Download/transfer

- Tamper-proof HMI application – password-protected project source

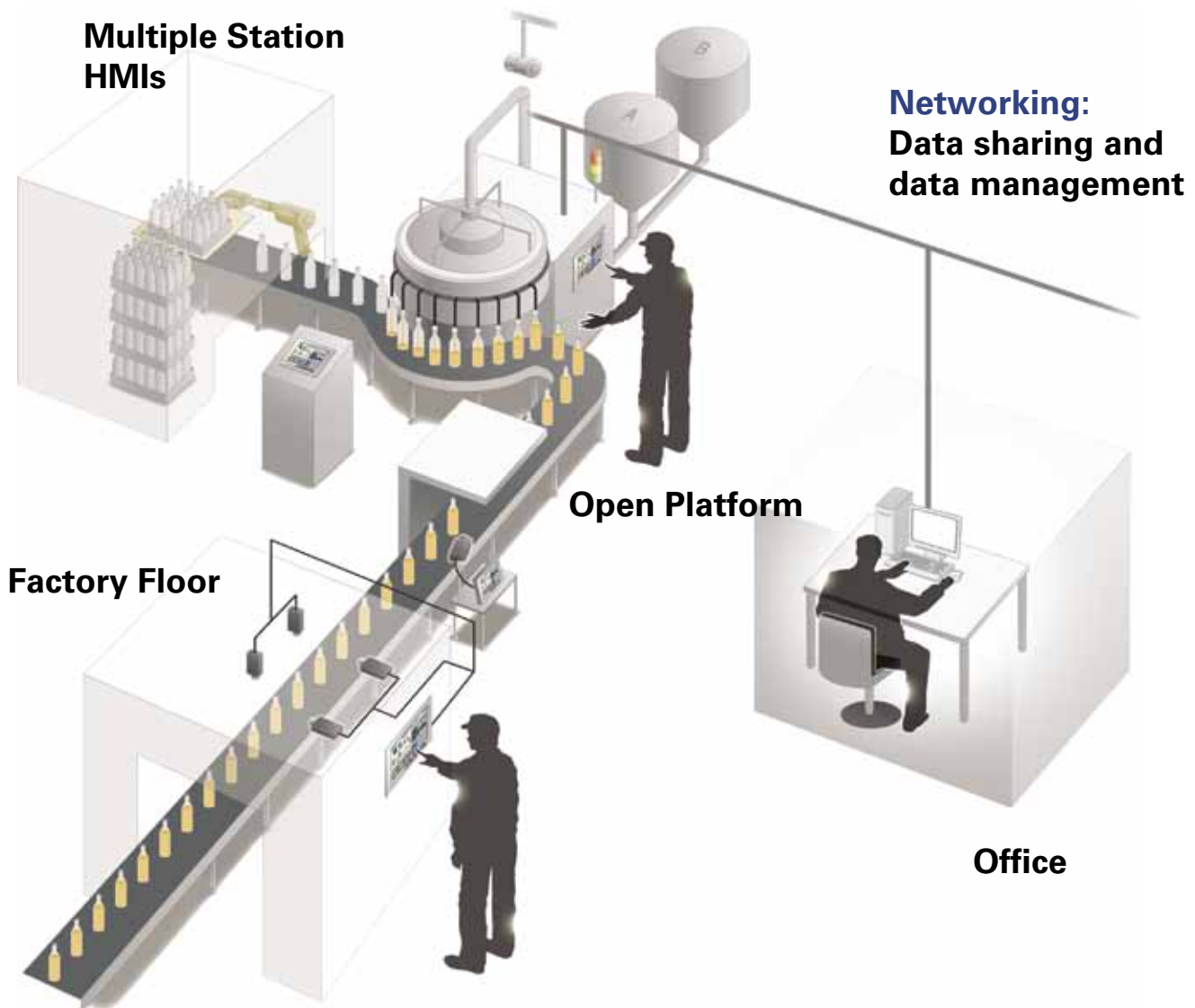
Easy HMI Development

Simple to Complex Visualization Applications



Visualization Development Solutions
Design for simple stand alone machines or a complete HMI network and data management solution.

One Development Software



Flexible and Friendly HMI Development Environment

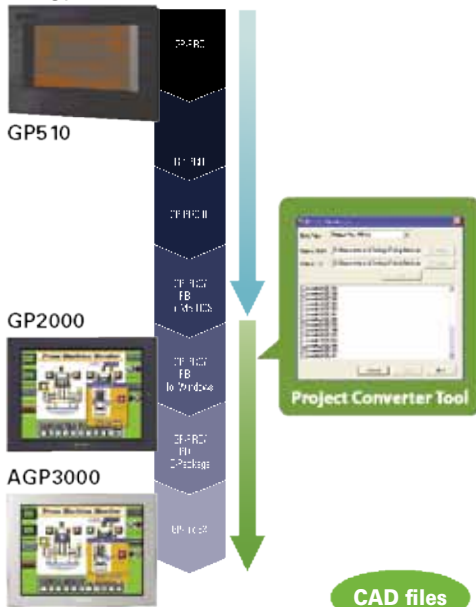


HMI Application Development

Application Investment Protection
 Import older project files.

Project Converter

Import and convert project data created with GP-PRO/PB II or III to upgrade to latest technology.

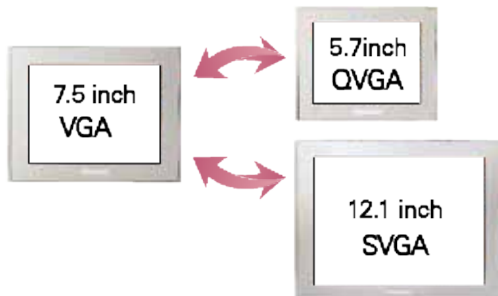


Display CAD images on the operator interface!
Pro-face converter

Write DXF, DWF files downloaded using Visio to GP-Pro EX project files. You can also use CAD data on screens.

Auto Screen Scaling

Built-in Resolution Converter automatically converts project files to different resolutions. Significant time savings in changing screen sizes.



Powerful Parts Toolbox allows for part customization and expansion.

Parts Toolbox

Create screens more efficiently by understanding how parts are used at the site and easy search for parts.



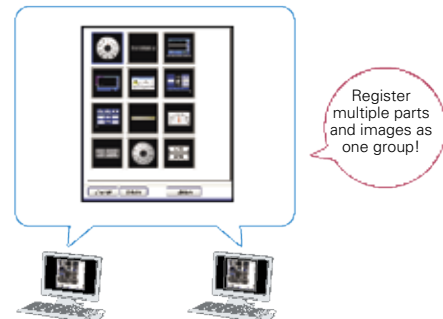
- Category selection**
 Select from switch/lamp/data display/graph/etc.
- Type (shape) selection**
- Color selection**
- Pattern selection**
 0 - 256/interface lock/delay
- Parts display based on category**
- Color number selection**
 Select from 65535 colors/256 colors/etc.
- Part drawing ID**

Find Parts fast by browsing images!

- Plus!**
- Select shape and format of parts already in place by opening the editing screen (shape browser).
 - Register your own parts and group together for quick part placement

Share Images and Parts

Register Parts and images you created as a template. Save in server to share among designers



Design Powerful HMI Applications Make Your Machines Stand Out

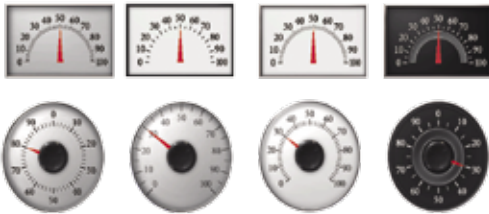
Free Online Parts enhances the look and feel of your HMI to differentiate you from your competitors.

3D Real Parts

Add three dimensional "Real Parts", to create easy to understand and impressive operator interface

Meters

Familiar Production equipment measurements and temperatures intuitively displayed.



Switches/Lamps

Look and visibility of a real switch or lamp, for added value to the machine operator.



3D Real Parts add value to your machine

Making an HMI application that is easy to read, easily understood and minimizes operator error can be challenging. Use these enhanced parts to provide familiarity to the operator.

Free Part Samples, etc.

Additional free part samples are available on the web for downloading. You can quickly expand your selection of factory automation equipment images to enhance HMI screens.

1000's of Parts

Easily incorporate part samples into existing screens.



OK/Cancel Choice Window Screen



Movable Keypad

Library of Screens

Sample screens that help you reduce screen development time



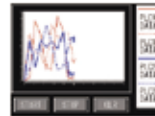
Clock Data Change Screen



Alarm History Display Screen

Extensive Features

High functionality and features distinguish Pro-face HMIs from Competitors.



Multiple Trend Graph Display Feature



Capturing USB Storage Screen

Pre-configured Device Connections

Simplify complex control settings for controllers and inverters with sample communication presets.



Yokogawa Electric Corporation: FA-M3



Yaskawa Electric Corporation: MP2300

PLC Communication Tester

Quickly test communications between the PLC and HMI with these preset communication settings.

Download sample parts for FREE!

Our Support site is designed to help you Maximize the value of your Pro-face HMI.



Everything you need is here!
Tips and tricks, Learning Center,
Educational videos and more!

A vast Resource

- FAQs
- Manuals
- Sample downloads
- Screen Development techniques
- HMI Learning Center

Extensive HMI Support Site For you!

<http://www.hmisource.com/otasuke/>





HMI Application Development

Reduce number of screens with extensive animation features.

Part Visibility On/Off

Control part visibility by device or operator. Save development time and reduce project file size.



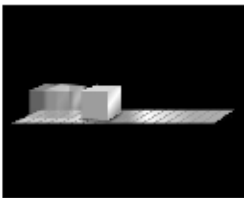
Use the same base screen

Reduce work by eliminating need to create new screens.

Move/Rotate Graphics

Move/rotate graphics drawings and images, etc. Reduces design time creating call-up screens.

Horizontal/vertical transfer



Express progress and movements on a conveyor.

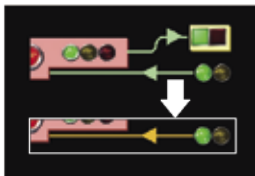
Rotate



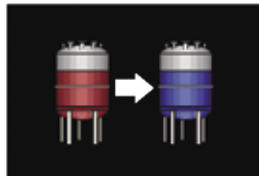
Animate meters to display realistic situations.

Control Graphic Colors

Vary the color of graphics drawings and images, etc. Eliminates work involved in creating call-up screens.



Change the colors via various control parameters



Color change showing current operating conditions

Change the color of lines, drawings, letters, graph lines, background, etc.

Functional parts simplify screen design and enhance readability.

Font Choices for Data Display (Bitmap)

7 segment feature on data display provides for easy readability and visibility.



Multiple fonts choices



Cool Pull Down Selector List

Reduce the number of switches installed using pull-down selection parts to save display space and development time.



Convenient switch to change screens.

Scalable Numeric Entry Display

Numbers entered using the numeric keypad are displayed on the keyboard created by the user to prevent incorrect data entry.



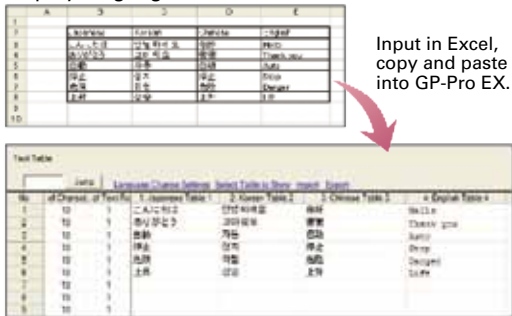
Key size may be scaled easily to match display criteria.

Rich Functionality Delivers Tools to Reduce Design Time

Easy language setup according to the operator.

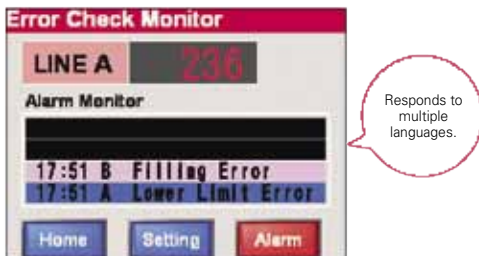
Create Multi-language Applications

Use Excel to create multi-country text tables to allow the HMI operator to easily switch between display languages.



Use Image Fonts for Readability

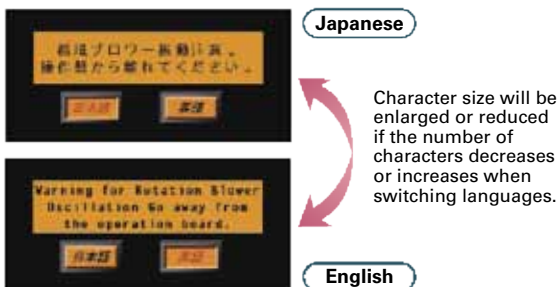
Windows computer fonts may be used for the data display, text table, and alarm. Create a stylish and easy-to-read screen.



The font and size of the text table and label of the switch/lamp can be setup individually.

Automatic Font Size Adjustment

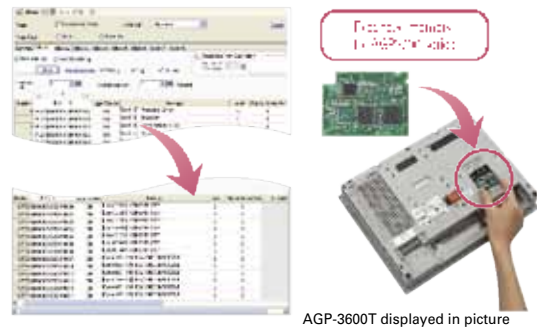
Switching languages when multiple-languages are used automatically adjusts font sizes according to the size of the switches, lamps and message displays.



Extended alarm functions for reduced labor thanks to added enhanced functions.

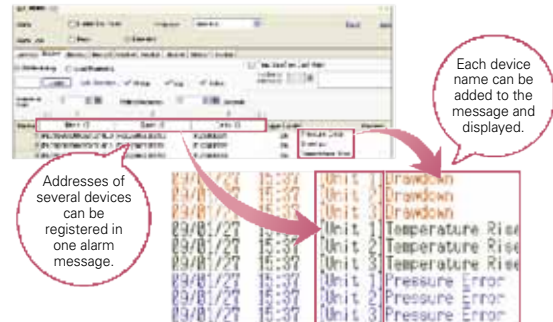
Expanded Alarm Entries

Expanded alarm monitoring entry points to 32,767. (Requires 7.5" or larger AGP3000 models with expanded memory option installed.)



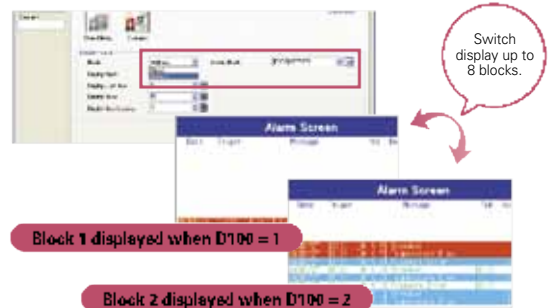
Share Multiple PLC Alarm Messages

Eliminates the need to individually create alarm messages using one message among multiple devices (addresses) for standardization. (Requires 7.5" or larger AGP3000 models with expanded memory option installed.)



Control Alarm Indication

Reduce screen design and save time by using alarm blocks that display alarms based on the device or level of importance on one alarm indicator.





HMI Application Development Solutions

Maximize the value of your HMI and do more than before.

Quick Search Window

Search for parts information in the project by item. Edit devices, labels and parts using search results.

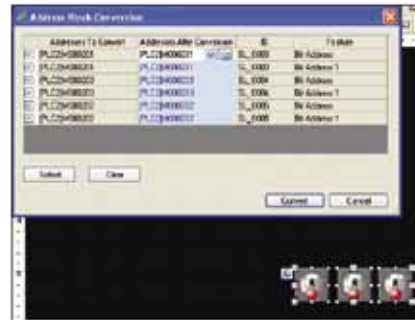


Search/exchange the logic programs instruction vocabulary and variables.

Perform Bulk replacement if necessary

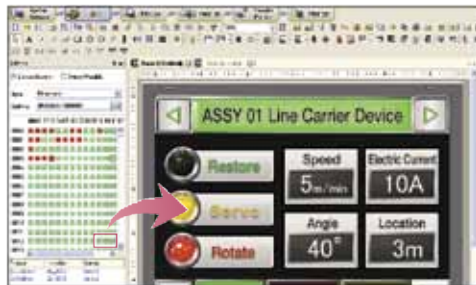
Simultaneous Part Address changing

Change selected part addresses simultaneously. Duplicating similar screens is ultra fast and easy.



Fast Address Mapping

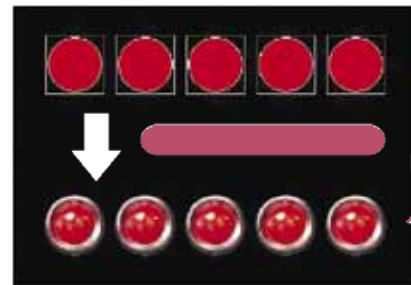
Drag and drop logic addresses on to graphic images for fast linking and avoid reduce logic control mistakes.



Call up parts by clicking a parts ID.

Multiple Part Editing

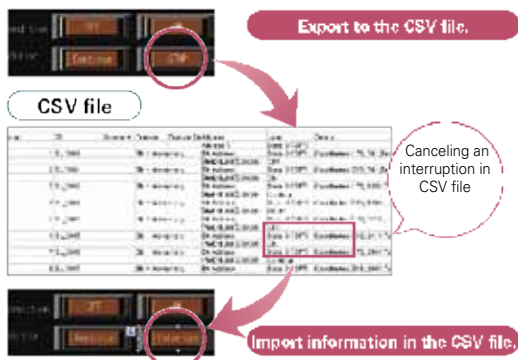
Change the shape of multiple parts at one time. Easily re-create images from past project files.



Alignment can be performed all at once using right/left & up/down position adjustments.

Importing/Exporting the Part List in CSV Format

Export a parts information record to CSV file. Make changes using Excel and import information back into the project. Make fast label changes to a large amount of parts.



Additional time saving editing functions

- Import Symbol Parameters**
 Applies to inputting in CSV format. The same PLC tag names can be imported to eliminate retyping saving days of extra work.
- Import/export text screen**
 Import/export GP-Pro EX text screens to CSV or text files to use other text editors.
- Importing/exporting Alarm Settings**
 Import/export alarm settings in CSV format.
- Searching the Screen Number List**
 Screens in the project can be searched and called up using their screen numbers.
- Continuously Copying to the Specified Area**
 Copy a part continuously to a specified position.

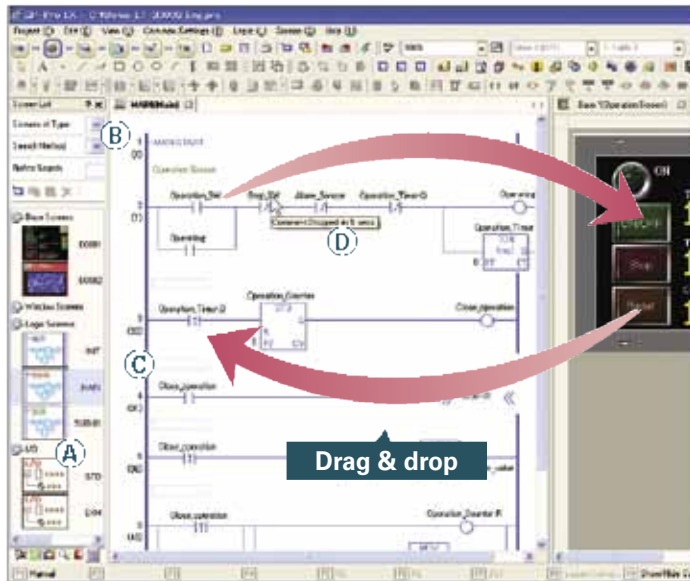
One Software Environment For Control Logic and HMI Development

Unload PLC from unnecessary control to enhance total system performance.

Ladder Logic Control Programming [See supported instruction notation list](#)

GP-Pro EX provides a built-in logic editor to create an all-in-one HMI plus Control application. Using one software for both screen development and ladder logic ensures glitch free operations and tighter revision control.

- AGP3000 (Excluding AGP-33x0H, AGP-3302B, AGP-3301, AGP-3200, and AGP-3201)
- LT3000 (Not compatible with some connection device address specifications)



A Block-structured Subroutine

Initialization logic, main logic and subroutines can be blocked, enabling smooth editing.

B Logic search/replace

Search or replace the indefinite numbers of logic with the search window.



C Number of steps displayed

The size of a logic program is easily viewed with the number of steps displayed up to 60,000 steps. The internal memory is reduced to 1MB for 60,000 steps (screen data).

D Tip Display for Comments

Displaying comments as tips makes a program clear. Comments can be displayed at any time.

Cool Maintenance Features allow monitoring of logic under operation

● Logic Display

You can check the operation of a logic program within the system on site.

● Address Display

The logic address is displayed, enabling you to check variable names and their current values.

● Online Editing

You can change a logic program even while the control function is operating without stopping work.

Use the logic program for controlling external devices

With AGP3000 Series C Class



- ① Directly control I/O device from the main unit
- ② Use a wire-saving unit and control I/O device*

With LT3000 series



- ① Directly control I/O device from the main unit (with special I/O)
- ② Install an EX module and control I/O device*

*UPI BIT input-output : 512→1,024, integer input-output : 128→256!

Create your own functions or write a simple communication driver

Develop a program or simple communication driver using Pro-face D-Script simplified language. Re-use GP2000 series D-Scripts created by user, no need to re-create work previous done.

Function	Bit operation	ON, OFF, clear
	Memory operation	Copy and shift, etc.
	CF file operation	File access, delete list output, etc.
	USB file operation	File access, delete list output, etc.
	SIO port operation	Send/receive data
	Printer operation	Send data
	Draw	Call screen, circle, straight line, square, etc.
	Others	Debug message and exit WinGP

Tool Conditional	Branching	IF, LOOP, etc.
	Comparison	AND, OR >, =, <, etc.
	Operation	+, x, bit operator, etc.

Configure the settings on a trigger condition such as "Continuous Action", "Timer-Bit change" and "When condition is satisfied". Additionally, a wide variety of functions such as search (searching and replacing strings in a script) and debugging functions (displaying messages and addresses on the system), etc., are provided.

GP-Pro EX Supported Logic Instruction List

(Instruction Name/Instruction Notation/Ladder Symbol)

Basic Instruction		
Normally Open	NO	
Normally Closed	NC	
Out	OUT	
Negative Out	OUTN	
Set	SET	
Reset	RST	

Pulse Basic		
Positive Transition	PT	
Negative Transition	NT	

Program Control		
Jump	JMP <P>	→ LABEL NAME
Jump to Subroutine	JSR <P>	→ SUBROUTINE NAME ←
Return	RET	
Repeat number of times (For)	FOR	
Repeat number of times (NEXT)	NEXT	
Inverse	INV	
Exit	EXIT	
Power Bar Control	PBC	
Power Bar Reset	PBR	
Logic Wait Instruction	LWA	

Timer Instruction		
On Delay Timer	TON	
Off Delay Timer	TOF	
Pulse Timer	TP	
Accumulate On Delay Timer	TONA	
Accumulate Off Delay Timer	TOFA	

Counter Instruction		
Up Counter	CTU <P>	
Down Counter	CTD <P>	
Up/Down Counter	CTUD <P>	

R/W Instruction		
Time Read/Write		
Time Read	JRD <P>	
Time Set	JSET <P>	
Date Read/Write		
Date Read	NRD <P>	
Date Set	NSET <P>	

Operation Instruction		
Arithmetic Operation		
Add	ADD <P>	
Subtract	SUB <P>	
Multiplication	MUL <P>	
Division	DIV <P>	
Modulation	MOD <P>	
Increment	INC <P>	
Decrement	DEC <P>	
Time Operation		
Time Addition	JADD <P>	
Time Subtraction	JSUB <P>	

Logical Operation		
Logical AND	AND <P>	
Logical OR	OR <P>	
Logical XOR	XOR <P>	
Logical NOT	NOT <P>	

Transfer		
Move (Copy)	MOV <P>	
Block Move (Block Copy)	BLMV <P>	
Fill Move	FLMV <P>	
Exchange	XCH <P>	

Shift		
Shift Left	SHL <P>	
Shift Right	SHR <P>	
Arithmetic Shift Left	SAL <P>	
Arithmetic Shift Right	SAR <P>	

Rotation		
Rotate Left	ROL <P>	
Rotate Right	ROR <P>	
Rotate Left with Carry Over	RCL <P>	
Rotate Right with Carry Over	RCR <P>	

Function Instruction		
Calculate Function		
Sum	SUM <P>	
Average	AVE <P>	
Square Root	SQRT <P>	

Function Instruction		
Calculate Function		
Bit Count	BCNT <P>	
PID	PID	

Trigonometric Function		
Sine	SIN <P>	
Cosine	COS <P>	
Tangent	TAN <P>	
Arc Sine	ASIN <P>	
Arc Cosine	ACOS <P>	
Arc Tangent	ATAN <P>	
Cotangent	COT <P>	

The other Function		
Exponential	EXP <P>	
Logarithm	LN <P>	
Log Base 10	LG10 <P>	

Compare Instruction		
Arithmetic Compare		
Equal	EQ	
Greater Than	GT	
Greater Than Or Equal To	GE	
Less Than	LT	
Less Than Or Equal To	LE	
Not Equal	NE	
Time Compare		
Time Compare Equal	JEQ	
Time Compare Greater Than	JGT	
Time Compare Greater Than Or Equal To	JGE	
Time Compare Less Than	JLT	
Time Compare Less Than Or Equal To	JLE	
Time Compare Not Equal	JNE	

Date Compare		
Date Compare Equal	NEQ	
Date Compare Greater Than	NGT	
Date Compare Greater Than Or Equal To	NGE	
Date Compare Less Than	NLT	

Compare Instruction		
Date Compare		
Date Compare Less Than Or Equal To	NLE	
Date Compare Not Equal	NNE	

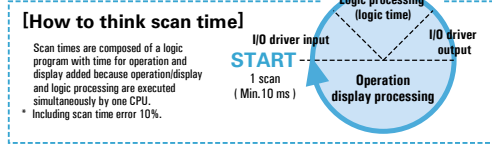
Convert Instruction		
Data Convert		
BCD Convert	BCD <P>	
BIN Convert	BIN <P>	
Encode	ENCO <P>	
Decode	DECO <P>	
Convert to Radian	RAD <P>	
Degree Convert	DEG <P>	
Scale	SCL <P>	

Type Convert		
Convert Integer to Float	I2F <P>	
Convert Integer to Real	I2R <P>	
Convert Float to Integer	F2I <P>	
Convert Float to Real	F2R <P>	
Convert Real to Integer	R2I <P>	
Convert Real to Float	R2F <P>	
Convert Seconds	H2S <P>	
Convert Seconds to Time	S2H <P>	

* Instructions with <P> correspond to positive transition instructions (differential transition). By adding P to the end of each instruction notation (LMP, etc.), you can use the instruction as a positive transition instruction (e.g., JMPP, JSRP, etc.).

Instructions for I/O driver		
STD driver		
Instructions for making changes to pulse output parameters	PLSX	
Instructions for making changes to acceleration/deceleration pulse	PLSY	
Instructions for retrieving pulse output parameters	PLSG	
Instructions for starting pulse output	PLS	
Instructions for stopping pulse output	PLSQ	
Instructions for making changes to PWM output parameters	PWMX	
Instructions for retrieving PWM output parameters	PWMG	
Instructions for starting PWM output	PWM	
Instructions for stopping PWM output	PWMQ	
Instructions for making changes to high-speed counter parameters	HSCX	
Instructions for retrieving high-speed counter parameters	HSCG	
Instructions for starting high-speed counter	HSC	
Instructions for stopping high-speed counter	HSCQ	
Instructions for verifying "pulse catch" input	PCH	
Instructions for clearing "pulse catch" input	PCHQ	

CAN driver		
SDO reading	SDOR	
SDO writing	SDOW	
Master check	DGMT	
Slave check	DGSL	



Addresses that are automatically allocated to the devices within GP-Pro EX	
Type	Address (Addressing Method)
Bit variable	X0000 ~ X0511
	Y0000 ~ Y0511
	M0000 ~ M7999
Integer variable	I0000 ~ I0127
	Q0000 ~ Q0127
	D0000 ~ D7999
Float variable	F0000 ~ F0127
Real variable	R0000 ~ R0127
Timer variable	T0000 ~ T0511
Counter variable	C0000 ~ C0511
Date variable	N0000 ~ N0063
Time variable	J0000 ~ J0063
PID variable	U0000 ~ U0007



Simulation Decreases Machine Startup and Application Troubleshooting Time

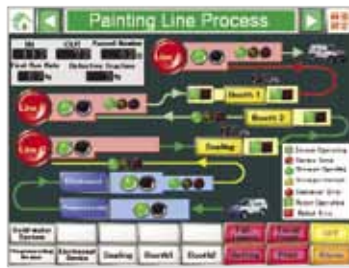
Verify Performance and Operation Without Hardware.

GP-Pro EX HMI Screen and Logic Simulation

A Pseudo-environment created on your PC.
Prevent errors in operations by allowing confirmation and debugging before transfer.

Screen Operation Check

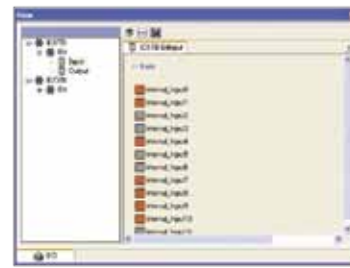
Confirm screen performance before transfer without connecting to PLC. Check actions performed using the touch panel installed by clicking with the mouse.



Do a screen capture to use for creating specifications.

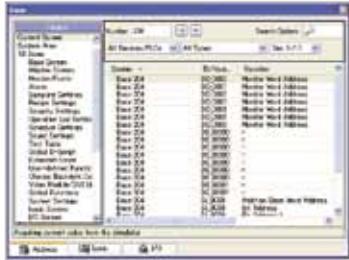
I/O Operation Check

Confirm current values for addresses allocated to I/O driver terminal in order to control external I/O. Some I/O drivers allow switching between ON/OFF state or change current values.



Controller Address Check

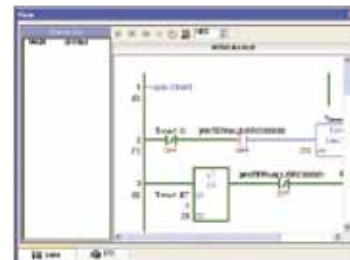
Display and edit the list of present values of virtual connected devices.



Perform Intuitive operation debugging using the screen view or logic view.

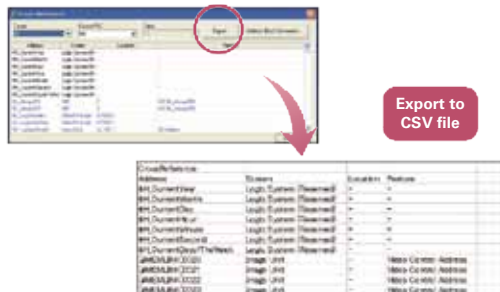
Logic Operation Check

Confirm present values and ON/OFF status of symbol variables before transferring the project file. Minimize time in logic program debugging.



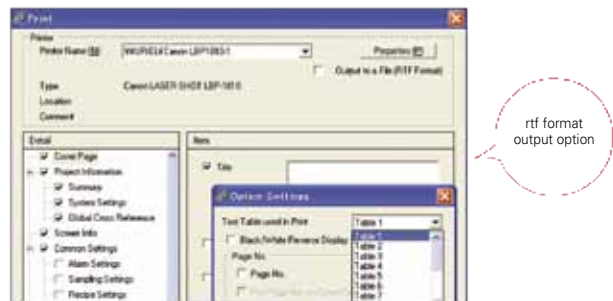
Cross Reference CSV Export

Output the list of used addresses as a CSV file to perform a cross reference check. You can select to output either individual screens or all screens.



Print out settings

Select and print required setup information of the project file. Minimize documentation labor.



rtf format output option



Security Controls Prevent Unauthorized Access

Security Controls Control Access Rights for Safety and User Tracking

A variety of security controls are available to allow operators access to select HMI screens while preventing unauthorized access to password protected screens such as recipes and alarm screens.

Define Access and Restrictions per User

Access rights consisting of user names, passwords and their assigned access level are determined for each operator interface.



Security Maintenance

Quickly and easily change passwords for each machine operator. Passwords may be changed or added using a CSV file on a USB memory stick!



Delete files after changes to ensure security.

Operator Safety (Security Per Part)

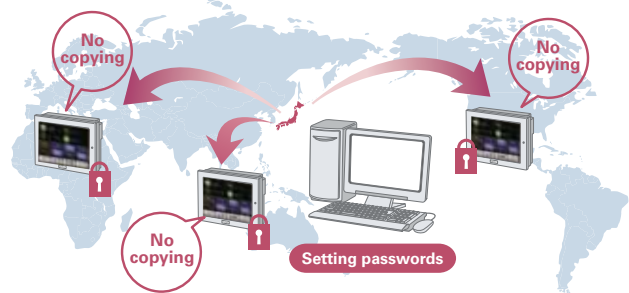
Configure access and authority parameters per part by requiring a certified ID or password for parts that are controlled by different security levels.



Security levels may be set for each part for operator safety. Combined with the animation function, some parts may become inactive or hidden if they require a higher authority level after operator login.

Project Security

Set passwords for each screen or script to prevent accidental unauthorized access. Use security features to protect intellectual property rights.



Investment Protection: Protect your data assets even when exporting the system overseas.

No PC on site Required!

Use a USB memory stick for daily, weekly or monthly security changes. Additionally perform part label changes, transfer screens, set recipes or collect log data from HMI.

Perform secure project updates for OEMs and System Integrators





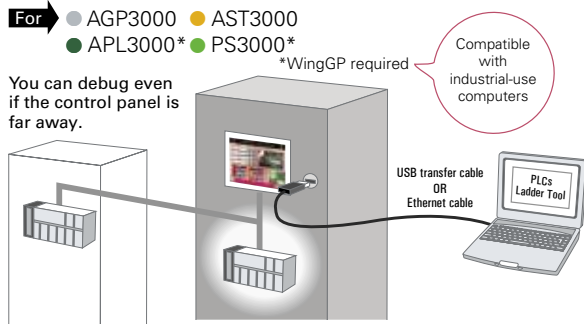
PLC Enhanced Communications Access and Programming via the HMI

Pass Through Programming and Monitoring PLC via Operator Interface

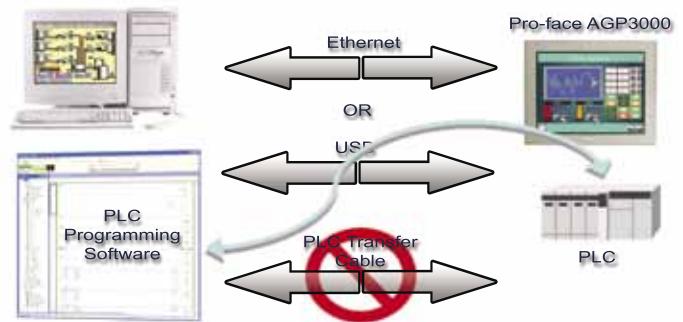
FREE Pass Through tool allows you to program the PLC through the operator interface. PLC access is provided through the Ethernet connection on the HMI. Ideal for quick programming changes to optimize overall system performance.

Pass Through

Easily view and debug ladder logic using the operator interface. Connect to controller without opening the panel via a USB front-mounted cable.



Remote PLC connection through HMI



PLC Access via your Operator Interface

Use Pass Through to:

- Program or monitor PLC via HMI
- Eliminate need to connect a PLC Programming cable
- Take advantage of existing HMI to PLC communication cable connection
- Access PLC remotely through HMI's Ethernet or USB port
- Save travel expenses by performing remote maintenance.

Application and Benefits:

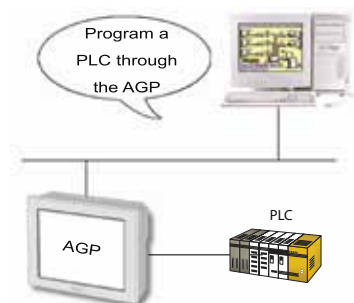
- ✓ On site PLC Diagnostics
 - No need for PLC programming cable. Use the USB or Ethernet port on the HMI to obtain communication access to the PLC.
- ✓ Off site Remote PLC Diagnostics
 - Use the Ethernet port on HMI to gain PLC access remotely. Even if PLC normally programs through a serial connection!
- ✓ Update PLC without disruption
 - Diagnose and perform PLC maintenance without disrupting communications to the HMI.



Using Pass Through (Tools Required)

Note: Not all PLCs are supported- see documentation

Operator Interface: AGP3000 Series HMI with Ethernet (AGP3xx0)
 Development Software: GP-Pro EX V2.0 or later
 Device/PLC Connection: Serial or Ethernet (see supported driver list)
 Network Connection: Dependent on supported driver (Ethernet or Serial)





Easy Field Upgrades Servicing Equipment without a PC

● Memory Loader Field Maintenance and backup with data protection

FREE Memory Loader tool stores project, drivers or images to upload to one or multiple HMIs using a simple USB or Compact flash storage device. Eliminates the need for HMI development software and a laptop on site. Used by maintenance personnel, OEMs, and System Integrators.



No PC required for Factory or remote site updates!



● Simple and Safe Field Maintenance

Use Memory Loader to:

- Prepare a CF or USB image to load on an HMI.
 - Includes Project, Driver and System updates
 - Multiple Projects can be stored simultaneously
- Download project to HMI without using a PC
- Back-up existing project in HMI before updating.
- Offer a simple update procedure that can be performed by the machine operator.

● Application and Benefits:

- √ Remote Field Upgrades
 - E-mail edited project file to site location for technician to store on USB stick and upload to operator interface.
- √ Project Backup and Recovery
 - Backup existing HMI application before updating to restore HMI to previous state if necessary.
- √ Update Multiple HMIs (portability)
 - Use CF card or USB memory stick to update all HMIs using the same application.



Using Memory Loader (Tools Required)

Operator Interface: AGP3000 Series HMI (AGP3xxx)
 File Storage: CF Card or USB Memory (> 128 MB)
 Development Software: GP-Pro EX V2.0 or later
 (needed only to edit project files before transferring to storage device.)

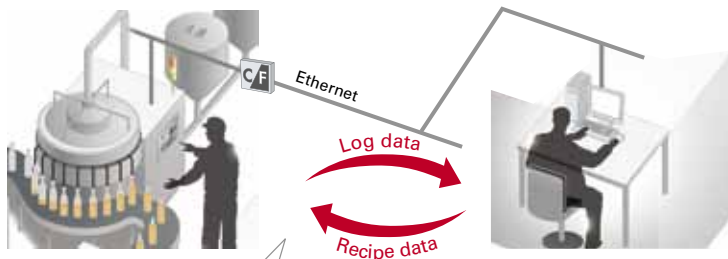




Performing Field Maintenance Cost Effective Equipment Servicing

● Transfer Tool Field Maintenance and backup with data protection

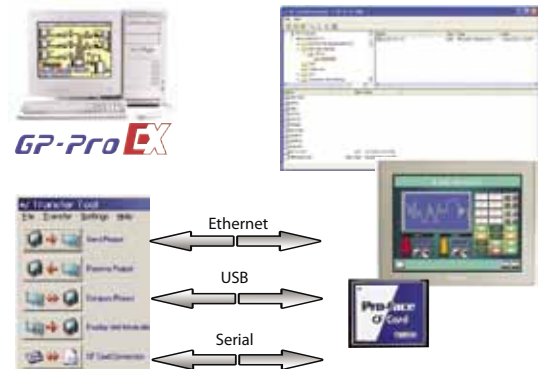
FREE Transfer tool allows application upgrades to the operator interface in the field without the need for development software! Ideal maintenance solution for OEMs or system integrators looking for an easy field upgrade solution.



By accessing the CF card/USB storage of the AGP main unit using file transfer, you can read or write log and recipe data.

Easy Machine Maintenance and data log retrieval.

Choose Various Interface Options to transfer Information



● Easy Low Cost Field Maintenance

Use Transfer Tool on site to:

- Update and backup HMI screen and logic projects.
- Download recipe, video, security and language updates to the compact flash card.
- Compare differences between two HMI applications.
- Upload log data from the HMI CF Card.
- Maintain information transfer flexibility via:
 1. Ethernet
 2. USB port
 3. Serial Port

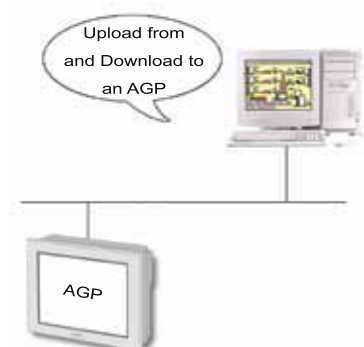
● Application and Benefits:

- √ HMI Application verification (revision control)
 - Check for application tampering by comparing HMI application project on unit to a known good project.
- √ Intellectual Rights Protection
 - Allow others to perform field updates without the ability to access proprietary project information.
- √ Access Compact Flash data storage device
 - Retrieve or store log, recipe, other files etc. using any of the three transfer methods.



Using Transfer Tool (Tools Required)

Operator Interface: AGP3000 Series HMI (AGP3xxx)
 Download Cable: USB, Serial or Ethernet Connection
 File Storage (Optional): CF Card or USB Memory (> 128 MB)
 Transfer Tool: Windows-based PC/AT, install stand alone
 Network Connection; Based on transfer method (USB, Serial, Ethernet)

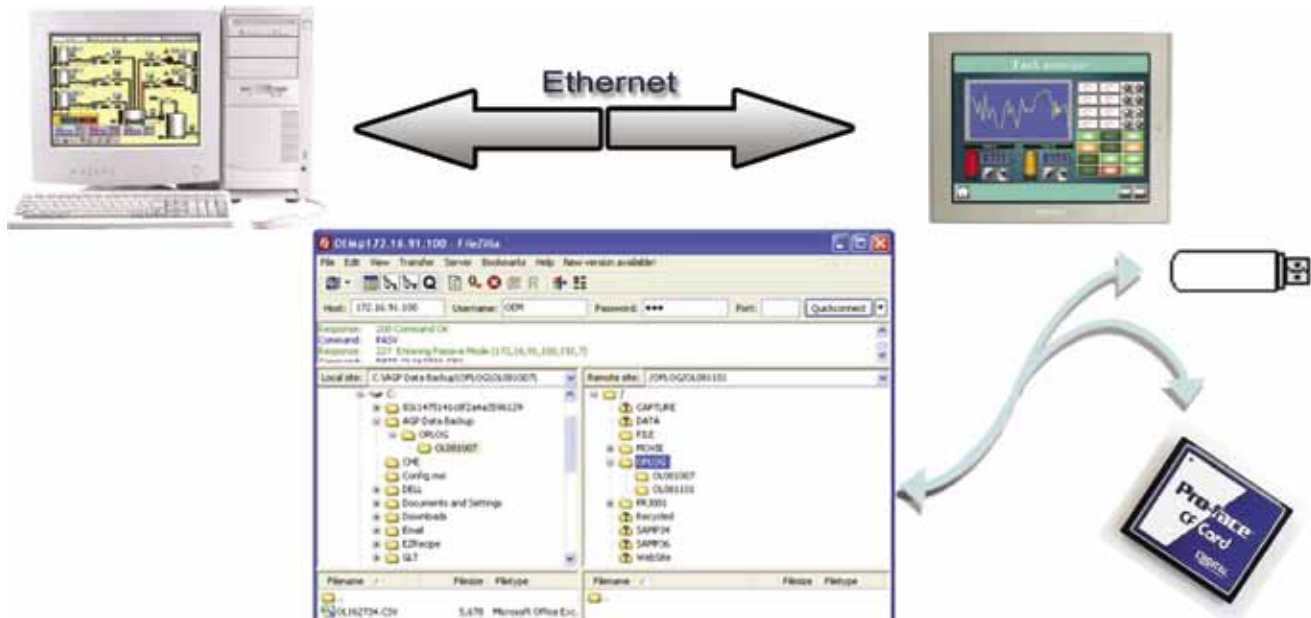




Remote Diagnostics and Maintenance Service and Support Cost Reduction

● **FTP Server** Upload and download data files to the Operator Interface data over the internet

FREE FTP Server provides OEMs and System Integrators the ability to access an operator interface to perform remote routine maintenance or online customer support without the need to travel on-site.



● Cut Costs and Add Service Value

Use any FTP Client to:

- Access the Operator interface via IP Address.
- Upload Diagnostics Data:
 1. Alarms
 2. Operation Log
 3. Event Recorder Video
- Perform Remote Maintenance:
 1. Upload and Download Operational Data
 2. Training Videos, Recipe Data, Security Settings
 3. Multi Language Updates

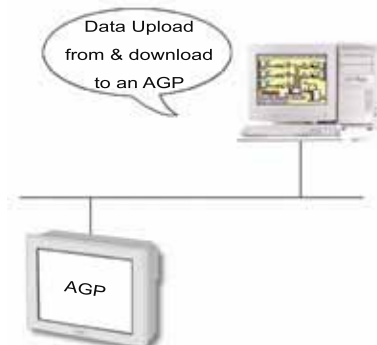
● Application and Benefits:

- ✓ Reduce travel cost \$\$\$
 - Acquire alarm logs, event recorder, video captures and data files over the internet.
- ✓ Save Travel Time
 - Perform remote diagnostics and phone support in your office, eliminating on-site travel time.
- ✓ Easy Field Maintenance:
 - Update recipe data, security settings and language settings without on-site plant floor visit.



Using FTPServer (Tools Required)

Operator Interface: AGP3000 Series HMI with Ethernet (AGP3xx0)
 File Storage: CF Card or USB Memory (> 128 MB)
 Development Software: GP-Pro EX V2.0 or later
 FTP Client: Filezilla, Internet Explorer, or similar
 Network Connection: Open access to AGP static IP address

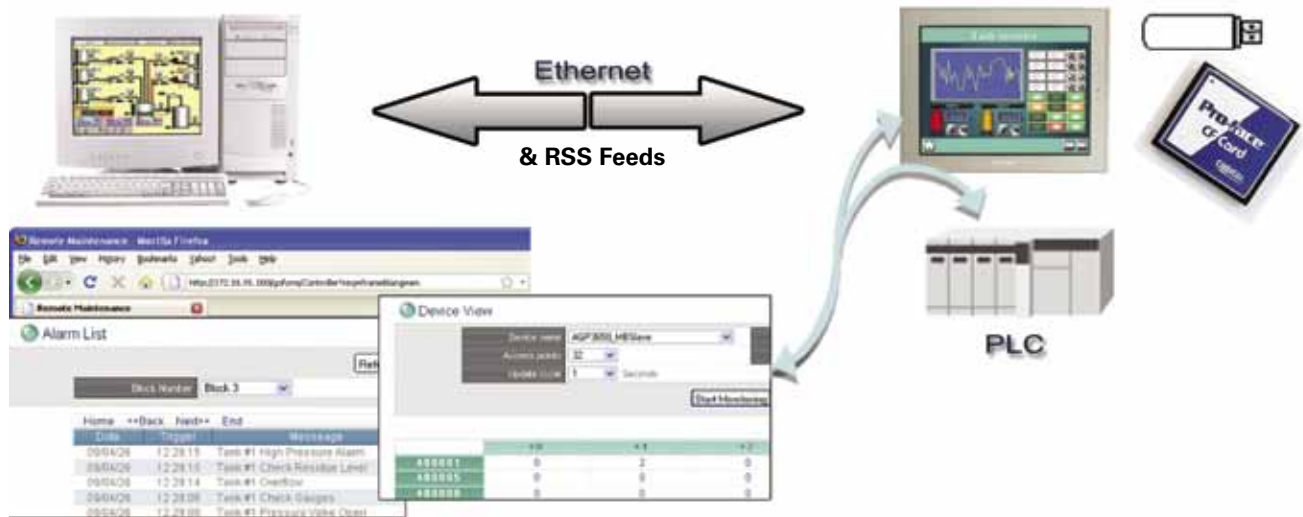




Remote Monitoring and Alerts Efficiency and Optimization

● **WebServer** RSS Feed alarm monitoring and launch GP-Viewer with browser

FREE WebServer provides OEMs , System Integrators and End-users to automatically receive alarm notifications through RSS feeds, or launch GP-Viewer to monitor the machine operator activities.




● Monitor Machine and Process Performance

- Use standard Web browser to:
- Access the Operator interface via IP Address
 - View Active and Historical Alarms
 - Read and Write data to Operator Interface
 - Read and write data to PLC memory
- Launch additional HMI software tools
 1. Launch GP-Viewer to monitor and train machine operator remotely
 2. Launch FTP Server to perform web-based maintenance updates.

● Application and Benefits:

- ✓ Remote Alarm Monitoring
 - Automatic notification via RSS feeds
 - Review and prioritize daily alarms to reduced maintenance costs.
- ✓ Update PLC Data
 - Optimize machine performance using web-based monitoring and updating PLC data values.
- ✓ Update Operator Interface Data
 - Reduce individual operator alarm inspections to increase maintenance efficiency.



Using WebServer (Tools Required)

Operator Interface: AGP3000 Series HMI with Ethernet (AGP3xx0)

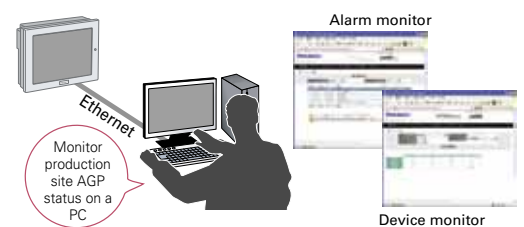
Web Content Storage: CF Card or USB Memory (> 128 MB)

RSS Reader: Optional, any 3rd party RSS reader

Development Software: GP-Pro EX V2.0 or later

Web Browser: Internet Explorer, Mozilla, Firefox or Similar

Network Connection: Open access to AGP static IP address





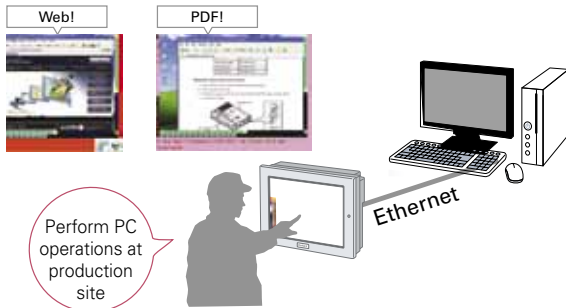
Remote PC Access Expands HMI Capability

Remote PC Access (RPA) The full power of a PC available to your HMI

Remote PC Access (RPA) brings full PC functionality to a dedicated operator interface. Open any document such as PDFs, CAD, JPEGs, etc. or hot link to the machine builder's web site from the display screen of the operator interface. Accesses a remote Server PC and eliminates the need for PC on the factory floor.

Remote PC Access

Interact with a remote server PC using the operator interface. The Operator Interface shows the same PC server display on its screen.



Perform PC operations at production site

Only for Ethernet TFT HMIs with VGA graphics and higher

Internet, E-mail, Manual Access, etc.

Open any office tools such as outlook, Excel, or Word to write notes or obtain latest machine information.



Display Remote PC Screen on HMI Screen

Use RPA to launch and control any PC program:

- Access remote server PC using HMI via Ethernet
- UltraVNC server required to be running on PC
- View and Control the PC server remotely
- See the remote PC screen on the Operator Interface
- HMI touch screen and keypad provide full interaction with remote PC software.

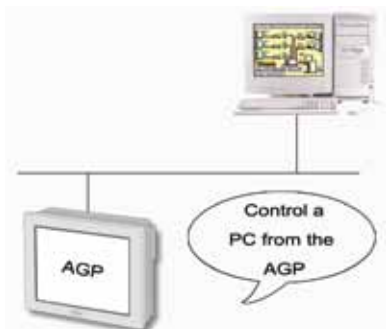
Application and Benefits:

- √ Updating Machine Documentation
 - Store machine manuals in one location on a remote PC server
 - All HMIs with RPA will automatically see the latest version posted.
- √ Design Internet Hot Links to OEM Site
 - Create HMI buttons that open up OEM web site to get latest machine updates.
- √ Review Work Process and Reports
 - Keep current with production changes, supply demand, and productivity reports.



Using Remote PC Access (Tools Required)

- Operator Interface: AGP3000 Series HMI with Ethernet (AGP3xx0)
- Development Software: GP-Pro EX V2.0 or later
- RPA License: Requires one license for each HMI
- Remote PC: Requires PC running UltraVNC Server (included free on GP-Pro EX CD)
- Network Connection: Open access to AGP static IP address





Remote HMI Control and Monitoring

● GP Viewer Monitor and Control an Operator Interface Remotely

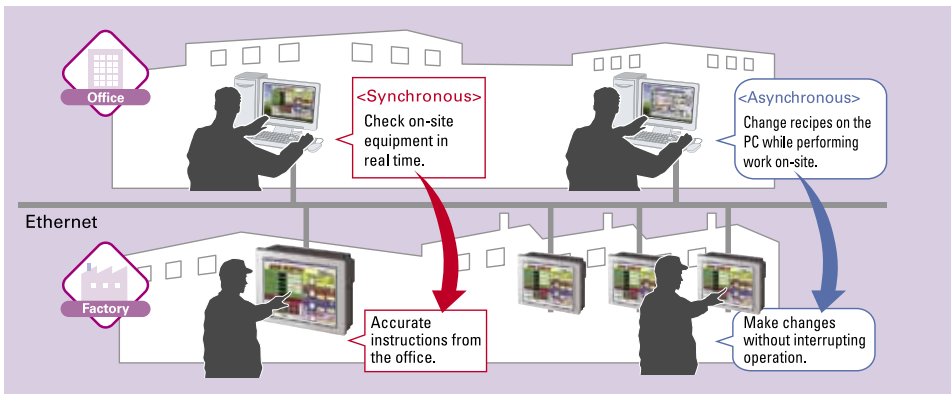
GP Viewer software is an ideal tool to service and support multiple locations from the main office. GP-Viewer allows monitoring of machine operators from a remote PC. See exactly what they see displayed on the HMI screen. Not only monitor, but have the ability to take control of operations for training and diagnostic purposes.

● Monitor and Train Machine Operators

Walk operators through the exact procedures to operate the machine safely. Provide as an ongoing service and support function for OEMs and Integrators.

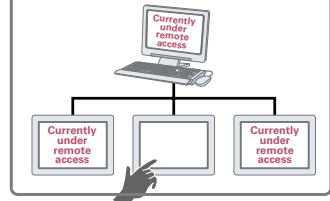
● Machine Diagnostic Servicing

GP-Viewer allows you to check diagnostic data on other screens without interfering with the operator. Make updates to optimize quality and performance.



Lock Out Feature Prevents Operational Errors

Prevent operational errors by the operator by locking operations other than for "in use" indicator by remote PC.



● GP-Viewer Functionality

All the Capability as if you were in front of the HMI

- Update HMI Security Settings for Safety and unauthorized access.
- Upload Diagnostic data such as alarms, operation log, event recorder video.
 - Analyze logged data and make adjustments
- Upload and download operational data
 - Training Videos, Recipe Data, and Multi-language updates.

● Application and Benefits:

- √ Monitor Machine Operators
 - View Operators while they are working to ensure procedures are being followed.
- √ Take Control of HMI from Remote location
 - Service the machine without the expense of traveling to the site location.
 - Control 4 HMIs simultaneously from your PC
- √ View Protected Diagnostic Screens
 - Gather maintenance data without interrupting the machine operator.



Using GP Viewer (Tools Required)

- Operator Interface: AGP3000 Series HMI with Ethernet (AGP3xx0)
- Development Software: GP-Pro EX V2.0 or later
- GP-Viewer EX License: Requires a license installed on each HMI
- GP-Viewer EX Software: Found on GP-Pro EX CD.
(Runs on Windows-based PC/AT computer)
- Network Connection: Open access to AGP static IP address





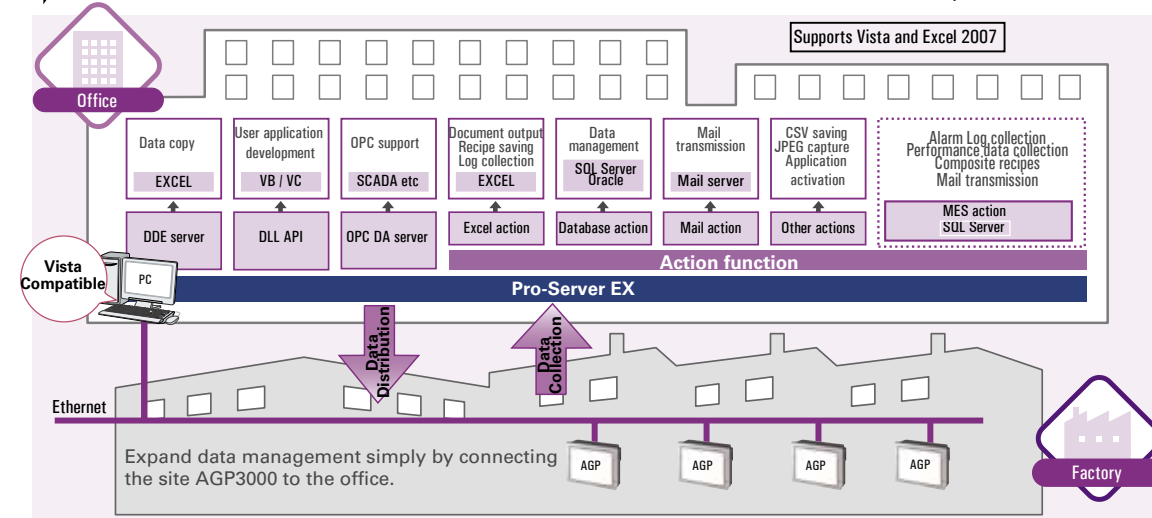
Data management software **Pro-Server EX**

Enterprise-Wide Data Sharing and Reporting solutions.

Pro-Server EX Bringing people, systems and machines together

Collect productivity and maintenance reports from Pro-face HMIs via Ethernet network.
Download operating instructions, such as recipes, from an office computer to a Pro-face Operator Interface.

For ● AGP3000/● LT3000 (with Ethernet) ● APL3000/● PS3000 (WinGP required)



● Recipe

Automatically deliver production instructions!

Directly convey recipes created at the office to the production floor. Use for quality control with proper machine settings.

● Data logging

Cost Effective Productivity Data Collection

Automatically collect PLC data, etc., using a variety of universal software such as Excel. Quickly follow up on work flow process at the production site.

● Reporting Results

Share information records using Excel

Accurately create production site documents with Excel, such as daily and monthly reports. Pre-defined Templates quickly generate reports with minimal effort.



- Daily report, monthly report
- Task planning
- Andon signal panel
- Manage work progress
- Oversee actual performance, etc.

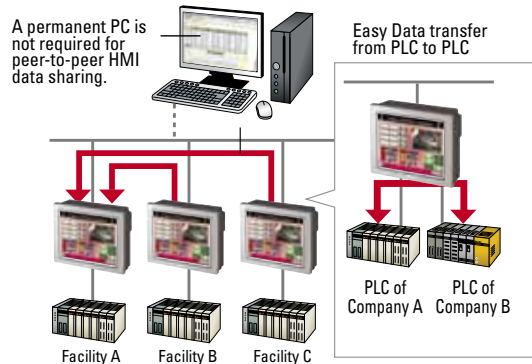
Compatible with third party production reporting software



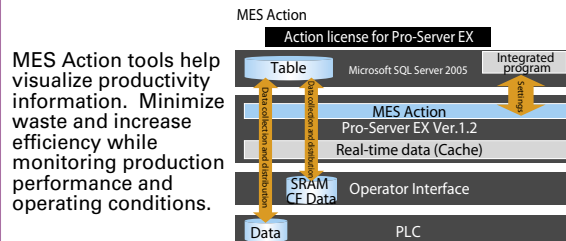
Connect directly to "EasyReport PRO" by Harmony Co., Ltd.

● Inter-device Hardware Communication

Use Pro-server to set up inter-device communication between Proface HMIs allowing data to be shared with multi-vendor devices regardless of the type of data or control device.



● Easy MES Integration Model: EX-MES-LICENSE-Vxx



Connect Data into an MRP, MES, ERP Business System or Machine to Machine Data Sharing

Enhanced data collection and connectivity software

✓ Applications

- Data sharing with production and maintenance groups
- Peer-to-peer HMI data sharing
- Log/write data to/from PLC
- Send instant e-mail alerts
- Collect and write data to Excel®, CSV or databases

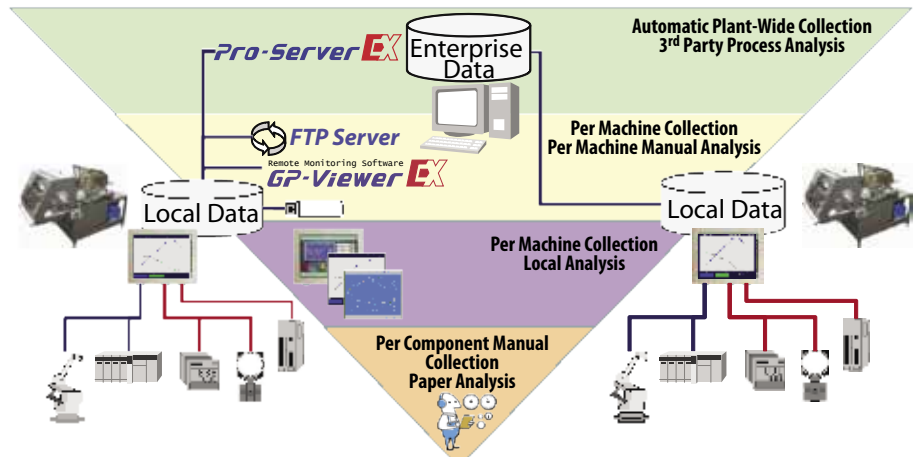
✓ Collect and manage data

- Up-to-the-minute production data
- Upstream status information
- Necessary raw material requirements
- Snapshot images of machine faults or instructions

✓ Connectivity Support

- OPC DA server
- DDE
- DLL
- API (VB, VB.NET, VC, C#.NET)
- Access™/Excel®
- ODBC, SQL, Oracle
- E-mail via SMTP
- MES actions

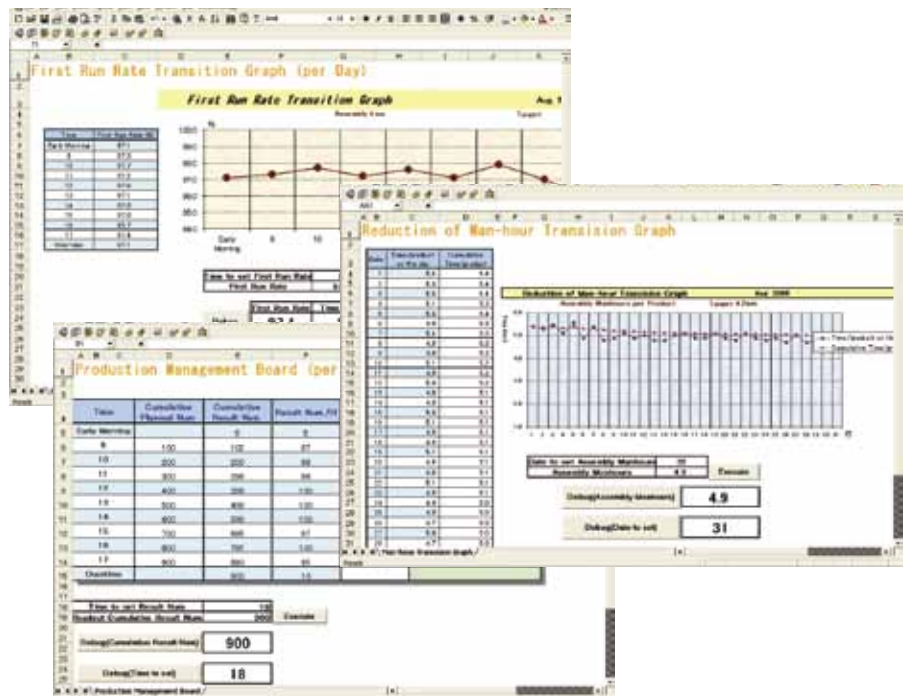
Collect and view up-to-the-minute, accurate data to optimize your productivity.



Increase overall operation efficiency

Deliver the right data to the right people

- ✓ Planning - Materials
- ✓ Scheduling - Resources
- ✓ Maintenance - Machine requirements
- ✓ Floor supervisor - Current status
- ✓ Quality - Real-time charts
- ✓ Plant manager - Key performance indicators





WinGP IPC Runtime Software for GP-Pro EX Maximizing Your Industrial Computer Potential

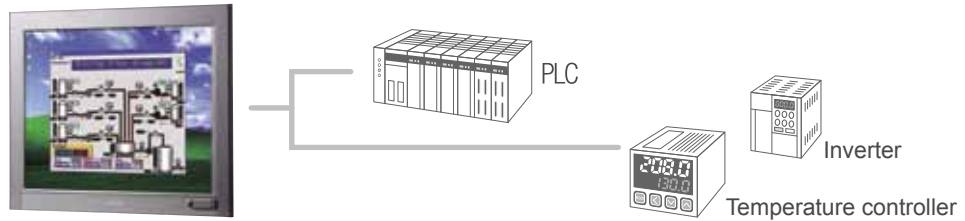
Operator Interface On-Demand with the flexibility of an industrial computer.

WinGP: Maximizing Your Industrial Computer Potential

WinGP is runtime software for GP-Pro EX HMI created applications. HMI applications developed for Pro-face dedicated operator interfaces are quickly installed on an industrial touch screen computer creating an On-Demand Windows-based HMI.

For → • APL3000/ • PS3000

Re-use HMI applications



Run a GP-Pro EX HMI application and communicate with various controllers using a Pro-face industrial computer.

Pro-face Industrial Computers

UL Class 1 Div 2 certified Industrial computers with built-in health monitoring to maximize process uptime. A wide variety of solid state drives, fanless, RAID and other options are available.

APL3000 Core Duo High Performance



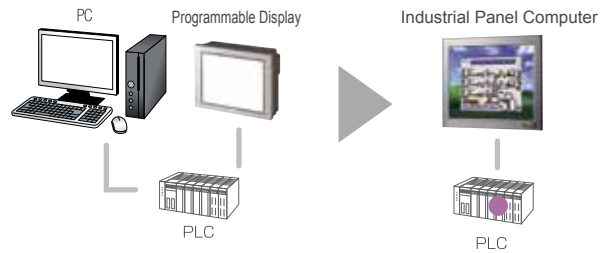
PS3000 Standard Performance



Reduce System Space

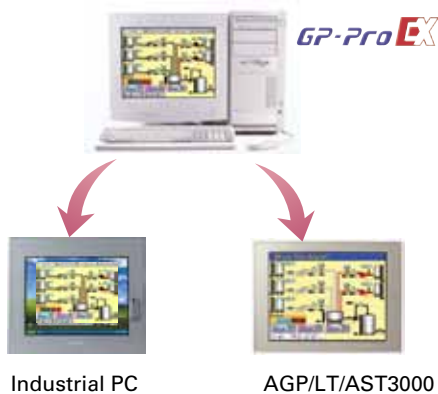
Eliminate Components and cut Panel Costs

Conventional systems that combine a PC, a graphic operator interface and a PLC can be simplified to an industrial PC and a PLC. Reduced components reduces maintenance time and costs.



Re-use Existing HMI Applications

Stay flexible with your choice of technology



3rd Party Application Flexibility

Communicate to WinGP runtime using a flexible link to user applications

- ▶ Link to User Database using the Handling API
Enables a user application to receive WinGP status and to change its setup. (Provided as the DLL file)
- ▶ Control from User Application using Device Address API
Enables a user application to read/write devices on controllers connected with WinGP. (Provided as a DLL file)

Supported Languages

• Visual C++ • Visual Basic • C# • VB.NET • VBA



PLC Drivers

Rockwell Automation

DF1
DH-485
EtherNet/IP:
√ SLC500/PLC5/MicroLogix
√ ControlLogix/CompactLogix (Native-Tag base)
DeviceNet Slave

Siemens AG

SIMATIC S7 3964(R)/RK512
SIMATIC S7 MPI Direct
SIMATIC S7 Ethernet
SIMATIC S5 CPU Direct
SIMATIC S5 3964(R)
PROFIBUS DP Slave

GE Fanuc Automation

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

Schneider Electric

Modbus Master (SIO or TCP)
Modbus Slave (SIO or TCP)
Modbus Plus
Uni-Telway

Modbus IDA

General Modbus RTU Master (SIO)
General Modbus TCP Master (Ethernet)

Control Technologies Corp.

CTC Binary Protocol (SIO)

Emerson Process Control

Emerson ROC Plus (Eth/SIO)

FANUC

Power Mate Series

FATEK Automation Corporation

FB Series SIO

Fuji Electric Corp.

MICREX-F Series SIO
MICREX-SX Series (Eth/SIO)

Hitachi Ind. Equipment Systems

HIDIC H Series (Eth/SIO)
S10V Series Ethernet
S10 Series SIO

Hyundai Heavy Industries

Hi4 Robot Driver

KEYENCE Corp.

KV-10 -80RW/ITW CPU Direct
KV700/1000/3000/5000
- Ethernet
- CPU Direct

Visual KV Series CPU Direct

Koyo Electronics Co. Ltd.

KOSTAC/DL Series CCM SIO
KOSTAC/DL Series Modbus TCP

LS Industrial Systems

XGT Series FEnet (Ethernet)
Master-K Series Cnet

Matsushita Electric Works

FP Series Computer Link SIO
XGT Series Cnet (SIO)

Meidensha

UNISEQUE Series Ethernet

Mitsubishi Electric Corp.

A Series
- Ethernet
- CPU Direct
- Computer Link
FX Series
- Ethernet
- CPU Direct
- Computer Link
Q/QnA Series

- Ethernet

- CPU Direct

- SIO

QnU CPU Direct Ethernet

QUTE Series CPU Direct

Mitsubishi Heavy Industries

DIASYS Netmaton Modbus TCP
MHI STEP3 Ethernet

M-System

R7 Series using Flex Network

OMRON Corp.

C/CV Series Host Link
CS/CJ Series Host Link
CS/CJ Series Ethernet/IP

Panasonic Electric Works

FP Series Computer Link (SIO)

Saia-Burgess Controls

SAIA S-Bus SIO

Sanmei Electronics Co., Ltd.

Si/CutyAxis Series SIO

Sharp MS Corp.

JW Series Computer Link SIO
JW Series Computer Link Ethernet

Toshiba

Computer Link (Eth/SIO)
PROSEC-T Ethernet

Toshiba Machine

TC Series: Tcmini/TC200 (SIO)

Toyoda Machine Works

TOYOPUC CMP-LINK (Eth/SIO)
TOYOPUC-PC3J Series

Yamatake

DMC50, SDC45 SIO

YASKAWA Electric Corp.

MEMOBUS (Eth/SIO)
MP Series SIO (extension)

YOKOGAWA Electric Corp.

Personal Computer Link (Eth/SIO)
FA-M3 (Ethernet)

Temperature Controllers

CHINO Corporation

Temp. Controller Modbus SIO

Fuji Electric Systems Co., Ltd.

Temp. Controller Modbus SIO

OMRON Corp.

Temp. Controller CompoWay/F

RKC Instrument

Temp. Controller MODBUS SIO

Temp. Controller SIO

Shinko Technos Co. Ltd.

Indicating Controller SIO

Yamatake Corp.

Digital Controller SIO

Yokogawa M&C

Personal Computer Link SIO

Fieldbus Module

CAN in Automation

CANopen Slave

CC-Link Partner Association

CC-Link Intelligent Device

ODVA

DeviceNet Slave

EtherNet/IP Explicit messaging

PROFIBUS International

PROFIBUS DP Slave

Other Connections

Digital Electronics Corp.

Memory Link (Eth/SIO)
General Ethernet/SIO (via Script)

Vision Systems

Banner Engineering Corp.

PresencePlus Ethernet Cameras

COGNEX

Insight 5000 and Micro Ethernet Cameras

Robot Controllers

GE Fanuc Automation

Series 90 Ethernet (SRTP)

Hyundai Heavy Industries

H14 Robot Driver

IAI Corporation

Robo Cylinder Modbus SIO
X-Sel Controller

Inverters

Fuji Electric Corp.

Inverter SIO

Hitachi IES Co., Ltd.

Inverter ASCII SIO

Inverter Modbus RTU

Mitsubishi Electric Corporation

FREQROL Inverter (SIO)

YASKAWA Electric Corp.

Inverter SIO

Bar-Code, 2-D Readers & Printers

	Manufacturer	Model	Type	Comments
Serial	Aimex Corp.	BR-530RS	Pen	Requires BB-60 power supply
	OPT Electronics	OPT-6125-RS	Touch scanner (read width: 65mm)	Requires DC5300T for power
	Denso Co.	HC-361ITR	Touch scanner (read width: 61mm)	Requires P-200 for power; also requires KRS-423-XF1K connector cable (from Sanwa Supply)
	HHP	IT3800LR-12	Linear imager	Requires cable 42203758-03 (IT3800LR-12 reader has been shown to work but is not fully tested)
	Cognex	Dataman 7500	1-D and 2-D bar-code scanner	Requires cable 42206139-04E cable, also requires power supply
	Any/All	Any	Printer	ASCII text
USB	Aimex Corp.	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
	HHP	IT5800	Hand-held industrial scanner	5800SR050-0F00 is complete with USB cable
	Symbol	LS3408-FZ	Hand-held industrial scanner	Part #LS3408-FZ20005 needs cable CBA-U01-S07ZA
	Symbol	LS2800	1-D bar-code scanner	
	Epson	Stylus Photo R200/R260	Inkjet printer	Use USB cable FP-US00 or commercial type
	Epson	Any	ECS/P24-J84(C) compatible	Use USB conversion cable IEE1284 (commercially available)
NEC	Any	PC-PR201-PL compatible	Use USB conversion cable IEE1284 (commercially available)	
ETH	Any/All	Any	Remote print server	Use ethernet network to connect to remote print server
	Any/All	Any	Printer	ASCII text

■ Operating Environment

● GP-Pro EX

OS	Windows® 2000 (Service Pack 3 or later), Windows® XP (Home Edition, Professional), Windows Vista® (Ultimate, Home Premium, Home Basic, Business) *For the installation of this product, administrator rights are required.
CPU	Windows Vista®: Pentium® 4 (1GHz or greater) Other than Windows Vista®: Pentium® III 800MHz or greater (Pentium® 4 1.3GHz or greater recommended)
Resolution	SVGA 800 X 600 or better (256 colors or greater required)
Memory	Windows Vista® 1GB or greater (2GB or greater recommended) Other than Windows Vista® 512MB or greater (1GB or greater recommended)
Hard Disk Space	720MB or greater *Free space necessary for installation
Language	Software Menu
	Languages that Hardware can Display
FEP for Languages	Those supported by OS described above.
Other	.NET Framework Ver. 2.0 * On a PC without .NET Framework Ver. 2.0, this product is automatically installed.
	Microsoft® Internet Explorer Ver. 6.0 or later
	Adobe Reader® Ver. 6.0.2 or later
	Mouse (absolutely necessary), CD-ROM drive (necessary only for software installation) and printer (supported by the OS above)
	An environment where you are connected to the Internet * Only necessary for online user registration and online update service

*Please address inquiries about the site license to a sales representative.
*A USB port or Ethernet port is required to transfer screens on a PC.

● Transfer Tool (Only necessary for Transfer Tool installation)

OS	Windows® 98 (Second Edition or later), Windows® Me, Windows® 2000 (Service Pack 3 or later), Windows® XP (Home Edition, Professional), Windows Vista® (Ultimate, Home Premium, Home Basic, Business) *For the installation of this product, administrator rights are required.
CPU	Windows Vista : Pentium® 4 1GHz or greater recommended Other than Windows Vista® : Pentium® II 266MHz or greater recommended
Memory	128MB or greater (512MB or greater recommended)
Hard Disk Space	135MB or greater *Free space necessary for installation
Other	Mouse (absolutely necessary), CD-ROM drive (necessary only for software installation) and printer (supported by the OS above)

*A USB port or Ethernet port is required to transfer screens on a PC.

● Pass-Through

OS	Windows® 2000 Professional (Service Pack 4 or greater) Windows® XP (Service Pack 2 or greater) Windows Vista® (Ultimate, Home Premium, Home Basic, Business)
-----------	--

● Web Server

OS	Windows® 2000 (Service Pack 3 or later), Windows® XP (Service Pack 2) Windows Vista® (Ultimate, Home Premium, Home Basic, Business, Enterprise) Windows® Server2003 (Service Pack 2)
Supported Browser	Microsoft® Internet Explorer Ver.6.0 or 7.0
Screen Resolution	XGA 1024 X 768 or greater

● Pro-Server EX

OS	Windows® 2000 (Service Pack3 or later), Windows® XP (Home Edition, Professional) Windows® Server 2003 (For the installation of this product, administrator rights are required.) Windows Vista® (Ultimate, Home Premium, Home Basic, Business)
CPU	Pentium® III 500MHz or greater (Pentium® III 800MHz or greater recommended)
Resolution	SVGA 800 X 600 or greater (256 colors or greater required), only 96dpi font
Memory	128MB or greater (256MB or greater recommended)
Hard Disk Space	1GB or greater (2GB or greater recommended) *Free space necessary for installation
Language Software Menu	English/Japanese
FEP for Languages	Those supported by OS described above.
Other Software	Microsoft® Excel 2000~2007 (for setting the action function)
	Microsoft® Access 2000~2007 (for setting the action function)
	Microsoft® Internet Explorer Ver.5.0 or later (for setting the action function)
	.NET Framework Ver.1.1 (Service Pack 1)
Printer	Any printer if it is supported by the OS
Network Adapter	10BASE-T, 100BASE-TX
Network Configuration	TCP/IP protocol (Configure from "Control Panel" in Windows®)

● GP-Viewer EX

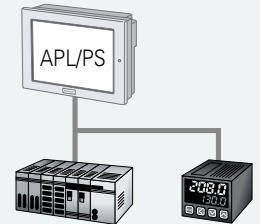
OS	Windows® 2000 (Service Pack 3 or later), Windows® XP (Service Pack 2) Windows Vista® (Ultimate, Home Premium, Home Basic, Business, Enterprise) Windows® Server 2003 (Service Pack 2)
-----------	---

WinGP Open HMI Solutions. Use an Industrial PC to run GP-Pro EX applications.

WinGP allows the same GP-Pro EX application to run on an industrial PC. Makes PC act as an On-Demand Operator Interface. Functionality similar to Pro-face dedicated AGP3000 series.

- Standardized screen development
- large selection of connection drivers
- Build a versatile network of 3rd party peripherals sharing information with your computer

*USB printer, USB code leader, modem, etc.



● WinGP GP-Pro EX Runtime for Pro-face Industrial PCs

OS	Windows® 2000 Professional (Service Pack 3 or later), Windows® XP Professional, Windows® XP Embedded
Memory	256MB or greater (512MB or greater recommended)

● WinGP GP-Pro EX Runtime for 3rd party Industrial PCs

OS	Windows® 2000 (Service Pack 4 or later), Windows® XP (Home Edition, Professional), Windows Vista® (Ultimate, Home Premium, Home Basic, Business, Enterprise) 32bit
CPU	Pentium® M 1GHz or greater recommended
Display Resolution	SVGA 800x600 or better
Memory	Windows Vista®: 1GB or greater (2GB or greater recommended) Other than Windows Vista®: 512MB or greater (1GB or greater recommended)
Hard Disk Space	200MB or greater

● Remote PC Access (RPA)

OS	Visit http://www.uvnc.com/
Other	GP-Pro EX (Ver. 2.0 or later) , RPA Keycode (EX-RPA (Sold separately)), Ultra VNC Ver. 1.0.2 should be installed on the PCs on the server, LAN cable, HUB (Commercially available). * Connect one server to one GP.

● Movie Converter (EX-MOVCON-LICENSE)

OS	Windows® 2000 (Service Pack 4 or later), Windows® XP (Home Edition, Professional (Service Pack 2 or later))
CPU	Pentium® III 1GHz or greater recommended
Memory	512MB or greater
Hard Disk Space	60MB or greater *Free space necessary for installation
Other	Mouse (absolutely necessary), CD-ROM drive (necessary only for software installation) Windows® Media Player 9.0, Direct X9.0c

Movie files that can be converted with the movie converter are different depending on the PCs used for conversion. Some codecs are equipped as standard in video/audio players such as Windows® Media Player. When installing the movie converter in an environment just after purchasing a PC, you can convert movie files described above to SDX. For movie files that cannot be converted to SDX, you may be able to convert these files by installing their codecs separately (*).

File format (Extension)	Video codec	Audio codec
AVI	Uncompressed (RGB)	Uncompressed (PCM)
AVI	DV-1	DV Audio
WMV	WMV9	WMA9
MPG	MPEG-1	MPEG-1 Layer-2

*In order to convert movie files, first, you need to install the codec of the movie file to be converted on a PC for conversion. We have confirmed the conversion of the following movie files to SDX on a PC with Ulead Video Studio 9 installed.

File format (Extension)	Video codec	Audio codec
AVI	DV-2	DV Audio
MPG	MPEG-2	MPEG-1 Layer-2
ASF	SD-Video (MPEG-4)	G.726

Ulead Video Studio 9 (<http://www.ulead.co.jp/product/videostudio9/>)
* For installation and use, a license is required. Purchase the license separately.

Note1) The environment recommended by the OS used, or a superior environment, is required for CPU/memory.
Note2) Partial restrictions available when using Windows Vista with Pro-Server EX. Check Website for details.

Software Selection Guide

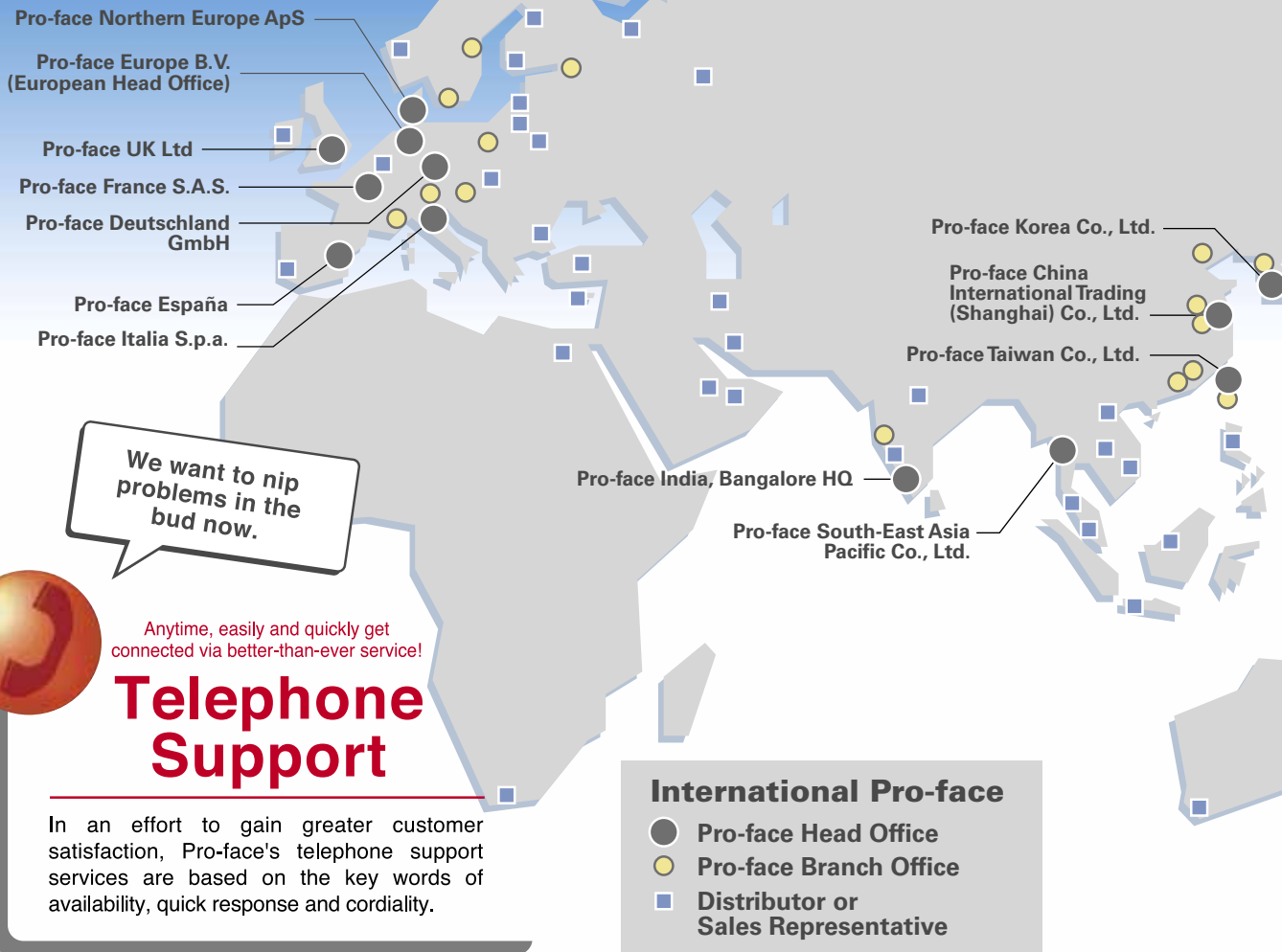
<i>Function</i>	<i>Web Server</i>	<i>FTP Server</i>	<i>Remote PC Access</i>	<i>GP Viewer EX</i>	<i>Transfer Tool</i>	<i>Memory Loader</i>	<i>Pass Through</i>
Monitor & control (live data)							
Monitor & Control a remote HMI				●			
View Live PLC and HMI data	●			●			●
Change Live PLC and HMI data	●			●			●
View Current & Historical Alarms	●			●			
Control a remote PC (programming PLC/HMI)			●				
Program/Monitor PLC through HMI			●				●
Diagnostics Information (stored data)							
Current Alarms	●	●		●	●		
Historical Alarms	●	●		●	●		
Diagnostics Video		●			●		
Transaction Log		●		●	●		
Screen & Logic Snapshots		●		●	●		
Project Maintenance							
HMI & Logic Project Backup					●	●	
HMI & Logic Project Update					●	●	
Multi Language Text Update		●			●	●	
Security Update		●			●	●	
Training Video Update		●			●	●	
Data Management							
Logged Data (sampling)		●		●	●		
Recipe Data Update & Backup		●		●	●	●	

Ordering Information

<i>Description</i>	<i>Part Number</i>
GP-Pro EX HMI Development Software	EX-ED-Vxx
Web Server	Included
FTP Server	Included
Transfer Tool	Included
Memory Loader	Included
Pass Through	Included
GP-Viewer EX	
License for 1 HMI	EX-VIEWER-LICENSE
License for 10 HMIs	EX-VIEWER-LICENSE-10
License for 30 HMIs	EX-VIEWER-LICENSE-30
Remote PC Access	
License for 1 HMI	EX-RPA
License for 10 HMIs	EX-RPA-10
License for 30 HMIs	EX-RPA-30

Service & Support

I N F O R M A T I O N



We want to nip problems in the bud now.



Anytime, easily and quickly get connected via better-than-ever service!

Telephone Support

In an effort to gain greater customer satisfaction, Pro-face's telephone support services are based on the key words of availability, quick response and cordiality.

International Pro-face

- Pro-face Head Office
- Pro-face Branch Office
- Distributor or Sales Representative

We want to make better screens in an easier way.



Expanded "Otasuke Pro!" support site
Upgraded handy screen samples

Web Support

The content of our "Otasuke Pro!" support site has been upgraded with services aimed at reducing development man-hours at customer by fulfilling contents such as FAQ and manual downloads.

We naturally want support overseas as well.



The same quality of support is provided at destination country of export

Global Support

One of the great features of Pro-face is that the same high level of customer support is available in countries where the product is exported to. Overseas customers can receive high quality support in both telephone inquiries and repair services.

With the Pro-face global brand,
get the support you need anytime, anywhere!
We have a reliable service and support system.

Please visit our website for visualization and data management solutions. ▶▶▶

<http://www.profaceamerica.com>

* For details on available support content, please contact the relevant Pro-face office.

Pro-face America, Inc.

Digital Electronics Corporation

Pro-face Australia Pty Ltd

We want to learn how
to get the most out
of Pro-face.

Easy-to-follow technical training
provided to help customers make
greater use of our products

Seminars

A variety of technical seminars are offered to help customers in order to get the most out of our Pro-face products. Easy-to-understand textbooks are prepared for what the customer wants to learn.

We want
Pro-face products
fixed promptly.

Should trouble occur,
it can be fixed swiftly
without incurring process loss!

Repair Services

Pro-face has eliminated loss throughout the entire process from providing quotation to customer, repair, and return delivery. We are constantly re-evaluating our systems to ensure satisfaction for all of our customers.

We want manuals
that even beginners
can understand.

Efforts to ensure anyone
and everyone can understand
how to use Pro-face products

Manuals

So that even beginners can use products immediately, we aim to make manuals easy-to-understand. We have already received high reviews from many customers in a survey on satisfaction.

Pro-face America
 1050 Highland Drive, Suite D
 Ann Arbor, MI 48108 USA
 Tel: 734-477-0600 or
 Toll Free: 800-289-9266
 Fax: 734-864-7347
<http://www.profaceamerica.com>

Customer Care Center:
 Tel: 800-289-9266
 Support: <http://support.profaceamerica.com>
 E-mail: customercare@profaceamerica.com



Globally Recognized, Globally Trusted, Globally Supported

<p>Global Head Office Digital Electronics Corporation Osaka, JAPAN Tel: +81 (0)6 6613 3116 Fax: +81 (0)6 6613 5888 http://www.pro-face.com info@pro-face.com</p>	<p>Australia and New Zealand Pro-face Australia Pty Ltd. Melbourne, AUSTRALIA Tel: +61 (0)3 9550 7395 Fax: +61 (0)3 9550 7390 http://www.pro-face.com.au http://www.pro-face.co.nz pfa@pro-face.com</p>	<p>China Pro-face China International Trading (Shanghai) Co., Ltd. Shanghai, P. R. CHINA Tel: +86 (0)21 6361 5175 Fax: +86 (0)21 6361 5176 http://www.pro-face.com.cn proface@pro-face.com.cn</p>	<p>India Pro-face India Bangalore, INDIA Tel: +91 80 4011 8050/8033 Fax: +91 80 4011 8073 sales.proface@proface.co.in</p>
<p>North/South American Head Office Pro-face America, Inc. Ann Arbor, MI U.S.A. Tel: +1 734 477 0600 Fax: +1 734 864 7347 http://www.profaceamerica.com sales.info@profaceamerica.com</p>	<p>South-East Asia Pacific Pro-face South-East Asia Pacific Co., Ltd. Bangkok, THAILAND Tel: +66 (0)2 617 5678 Fax: +66 (0)2 617 5688 http://www.proface.co.th support@proface.co.th</p>	<p>South Korea Pro-face Korea Co., Ltd. Seoul, SOUTH KOREA Tel: +82 (0)2 2630 9850 Fax: +82 (0)2 2630 9860 http://www.proface.co.kr support@proface.co.kr</p>	<p>Taiwan Pro-face Taiwan Co., Ltd. Taipei, TAIWAN Tel: +886 (0)2 2857 1121 Fax: +886 (0)2 2857 1021 http://www.proface.com.tw proface@proface.com.tw</p>
<p>European Head Office Pro-face Europe B.V. Hoofddorp, THE NETHERLANDS Tel: +31 (0)23 55 44 099 Fax: +31 (0)23 55 44 090 http://www.proface.com info@proface.com</p>	<p>Austria Pro-face Europe B.V. (Austria Office) Hagenberg, AUSTRIA Tel: +43 7236 3343-620 FAX: +43 7236 3343-629 http://www.pro-face.at office@pro-face.at</p>	<p>Belgium Pro-face Europe B.V. (Belgium Office) Tel: +32 (0)52 34 38 70 +32 (0)52 34 38 71 http://www.proface.be benelux@proface.com</p>	<p>Czech Republic Pro-face Europe B.V. (Czech Republic Office) Štěrbovice, CZECH REPUBLIC Tel: +420 373 721 214 Fax: +420 373 721 214 http://www.proface.cz brynda@proface.cz</p>
<p>France Pro-face France S.A.S. Mity-Mory, FRANCE Tel: +33 (0)1 60 21 22 91 Fax: +33 (0)1 60 21 22 92 http://www.proface.fr info@proface.fr</p>	<p>Germany Pro-face Deutschland GmbH Söllingen, GERMANY Tel: +49 (0)212 258 260 Fax: +49 (0)212 258 2640 http://www.pro-face.de sales@pro-face.de</p>	<p>Hungary Pro-face Europe B.V. (Budapest office) Szada, HUNGARY Tel: +36 28 40 46 55 FAX: +36 28 40 46 55 tamas@pro-face.com</p>	<p>Italy Pro-face Italia S.p.a. Bovisio Masciago (Milano), ITALY Tel: +39 0362 59 96 1 Fax: +39 0362 59 96 69 http://www.proface.it info@proface.it</p>
<p>Poland Pro-face Europe B.V. (Warsaw Office) Warszawa, POLAND Tel/FAX: +48 (22) 465-06-02 http://www.proface.pl proface@proface.pl</p>	<p>Scandinavia, Baltic Countries Pro-face Northern Europe ApS Roskilde, DENMARK Tel: +45 70 22 01 22 Fax: +45 70 22 01 33 http://www.pro-face-eu.net/ info@pro-face.dk</p>	<p>Spain and Portugal Pro-face España Cardedeu (Barcelona), SPAIN Tel: +34 (0)93 846 07 45 Fax: +34 (0)93 845 48 68 http://www.pro-face.es central@pro-face.es</p>	<p>Sweden Pro-face Sweden AB Löddeköpings (Malmö), SWEDEN Tel: +46 46 540 90 70 Fax: +46 46 71 27 90 http://www.proface-eu.net info@pro-face.se</p>
<p>Switzerland Pro-face Deutschland GmbH Regensdorf, SWITZERLAND Tel: +41 (0)43 343 7272 Fax: +41 (0)43 343 7279 http://www.pro-face.ch info@pro-face.ch</p>	<p>United Kingdom Pro-face UK Ltd Coventry, ENGLAND Tel: +44 (0)2476 440088 Fax: +44 (0)2476 440099 http://www.profaceuk.com info@profaceuk.com</p>	<p>Russia Pro-Face Northern Europe ApS (Saint-Petersburg office) Saint-Petersburg, RUSSIA Tel: +007 (812) 336-47-06 Fax: +007 (812) 336-47-18 http://www.pro-face.ru info@pro-face.ru</p>	

Contact your Pro-face Representative today