

Pro-face

Human Machine Interface

Touch
Panel

Easy
Operation

Beautiful
Graphics

Increased
Connectivity



- GP-2600T
- GP-2500T/S/L
- GP-2400T
- GP-2300T/S/L
- GP-2601T
- GP-2501T/S/L
- GP-2401T
- GP-2301T/S/L
- GP-2401HT
- GP-2301HS/HL



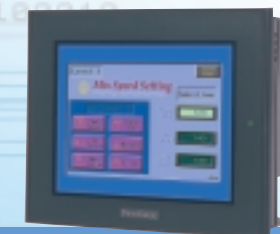
ISO9001
JQA-1367

GP 2000 SERIES

Pro-face

GP2000 SERIES

Increase your business opportunities with **powerful performance** and **Ethernet connectivity**.



Aluminum body for superb cooling and dust resistance.



- 12.1 inch
- TFT Color
- 800 x 600 pixels
- 256 Colors
- 4MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO
- Optional Video

GP-2600T

GP2600-TC11 CE
GP2600-TC41-24V CE



- 10.4 inch
- TFT Color
- 640 x 480 pixels
- 256 Colors
- 4MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO
- Optional Video

GP-2500T

GP2500-TC11 CE
GP2500-TC41-24V CE



- 10.4 inch
- STN Color
- 640 x 480 pixels
- 64 Colors
- 4MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2500S

GP2500-SC41-24V
CE



- 10.4 inch
- Monochrome LCD
- 640 x 480 pixels
- Black & White, Gray Scale
- 4MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2500L

GP2500-LG41-24V
CE



- 7.4 inch
- TFT Color
- 640 x 480 pixels
- 256 Colors
- 4MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2400T

GP2400-TC41-24V
CE



- 5.7 inch
- TFT Color
- 320 x 240 pixels
- 256 Colors
- 2MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2300T

GP2300-TC41-24V
CE



- 5.7 inch
- STN Color
- 320 x 240 pixels
- 64 Colors
- 2MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2300S

GP2300-SC41-24V
CE



- 5.7 inch
- Monochrome LCD
- 320 x 240 pixels
- Black & White, Gray Scale
- 2MB FEPROM
- 256KB SRAM
- CF Card
- Ethernet
- Expansion SIO

GP-2300L

GP2300-LG41-24V
CE

GP2001 SERIES

With the **Built-in CF Card I/F**,
handling of production data management and
screen maintenance is smooth and easy.



- 12.1 inch
- TFT Color
- 800 x 600 pixels
- 256 Colors
- 4MB FEPRM
- 128KB SRAM
- CF Card

GP-2601T

GP2601-TC11



- 10.4 inch
- TFT Color
- 640 x 480 pixels
- 256 Colors
- 2MB FEPRM
- 128KB SRAM
- CF Card

GP-2501T

GP2501-TC11



- 10.4 inch
- STN Color
- 640 x 480 pixels
- 64 Colors
- 2MB FEPRM
- 128KB SRAM
- CF Card

GP-2501S

GP2501-SC11



- 10.4 inch
- Monochrome LCD
- 640 x 480 pixels
- Black & White, Gray Scale
- 2MB FEPRM
- 128KB SRAM
- CF Card

GP-2501L

GP2501-LG41-24V



- 7.4 inch
- TFT Color
- 640 x 480 pixels
- 256 Colors
- 2MB FEPRM
- 128KB SRAM
- CF Card

GP-2401T

GP2401-TC41-24V



- 5.7 inch
- TFT Color
- 320 x 240 pixels
- 256 Colors
- 1MB FEPRM
- 128KB SRAM
- CF Card

GP-2301T

GP2301-TC41-24V



- 5.7 inch
- STN Color
- 320 x 240 pixels
- 64 Colors
- 1MB FEPRM
- 128KB SRAM
- CF Card

GP-2301S

GP2301-SC41-24V



- 5.7 inch
- Monochrome LCD
- 320 x 240 pixels
- Black & White, Gray Scale
- 1MB FEPRM
- 128KB SRAM
- CF Card

GP-2301L

GP2301-LG41-24V



Aluminum body for superb cooling and dust resistance.

GP2000H Series — Designed to meet global safety standards —



- 6.5 inch
- TFT Color
- 640 x 480 pixels
- 256 Colors
- 2MB FEPRM
- 128KB SRAM

- CF Card
- Tool Connector
- Vibration Function
- 3-position Enable Switch
- 3-contact Emergency Switch



GP-2401HT

GP2401H-TC41-24V



- 5.7 inch
- STN Color
- 320 x 240 pixels
- 64 Colors
- 1MB FEPRM
- 128KB SRAM

- CF Card
- Tool Connector
- Vibration Function
- 3-position Enable Switch
- 3-contact Emergency Switch



GP-2301HS

GP2301H-SC41-24V



- 5.7 inch
- Monochrome LCD
- 320 x 240 pixels
- Black & White, Gray Scale
- 1MB FEPRM
- 128KB SRAM

- CF Card
- Tool Connector
- Vibration Function
- 3-position Enable Switch
- 3-contact Emergency Switch



GP-2301HL

GP2301H-LG41-24V



GP2600/2601 Series

Ethernet Model



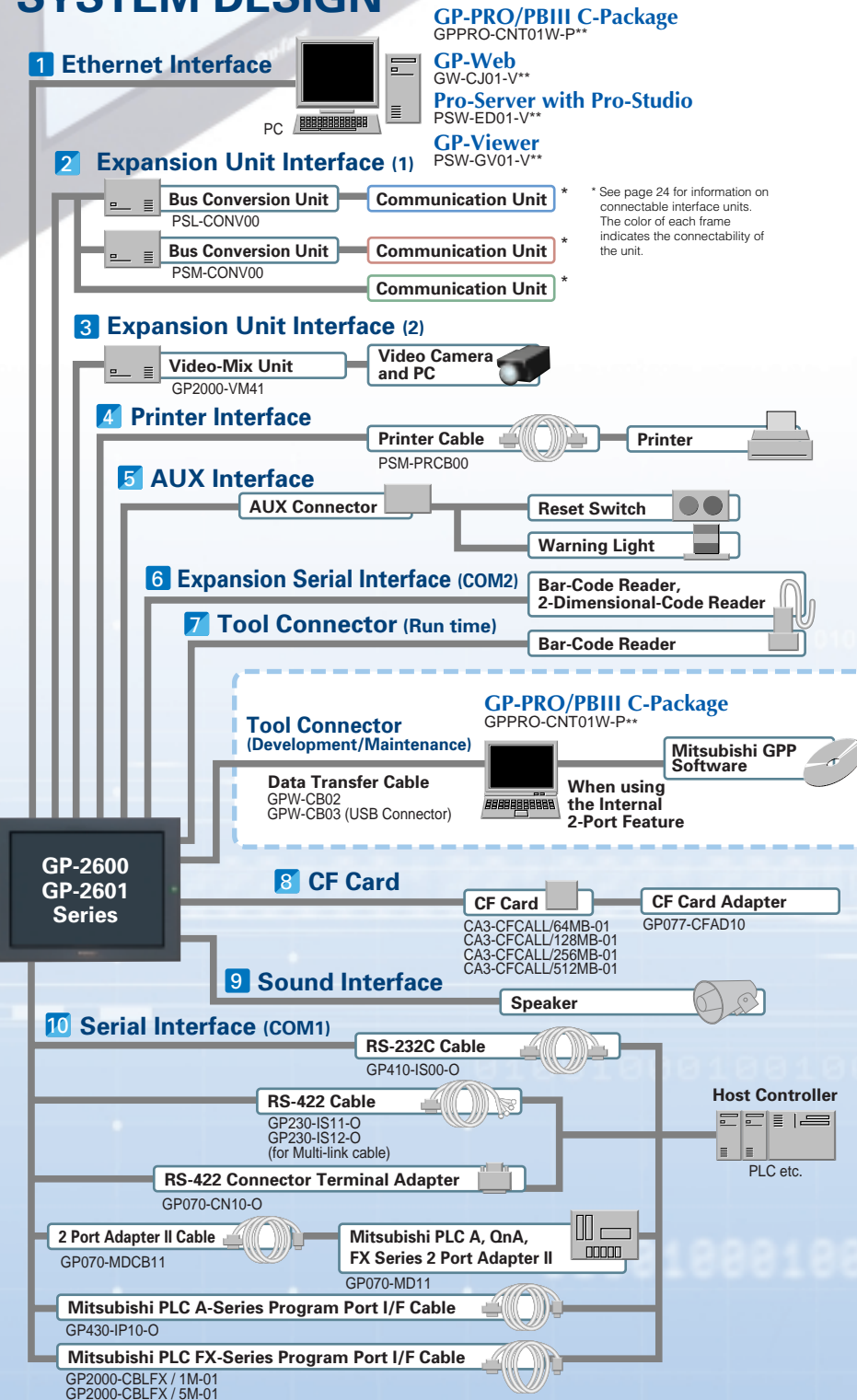
GP-2600T

Cost-efficient Model



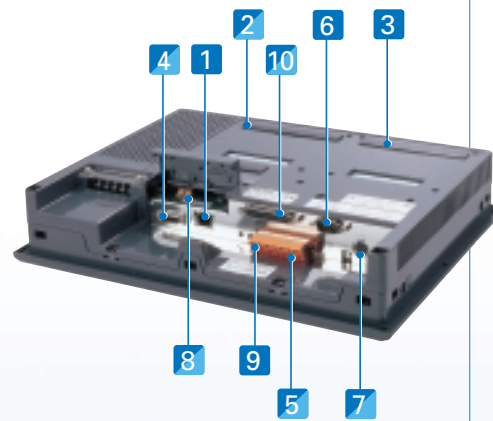
GP-2601T

SYSTEM DESIGN

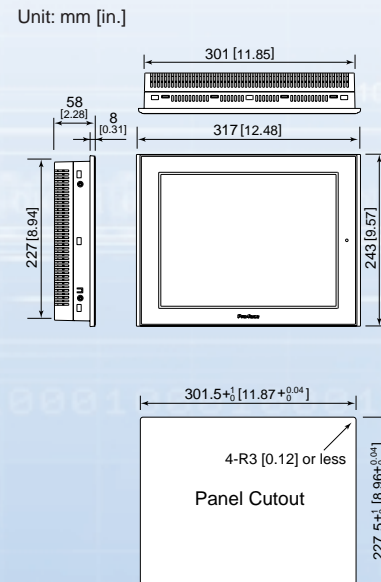


INTERFACES

- GP2600 Series Only.
- GP2600 and GP2601 Series can be used.



EXTERNAL DIMENSIONS



FUNCTIONAL SPECIFICATIONS

Model	GP2600-TC11 GP2600-TC41-24V
Display Type	TFT Color LCD
Display Colors	256 colors*1
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)
Display Resolution	800 x 600 pixels
Effective Display Area	W246mm [9.69in.] x H184.5mm [7.26in.]
Brightness Control	4 levels of adjustment available via touch panel
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts
Text	8 x 8 dots: 100 Char. x 75 rows 8 x 16 dots: 100 Char. x 37 rows 16 x 16 dots: 50 Char. x 37 rows 32 x 32 dots: 25 Char. x 18 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font
Font Sizes	Width: 1-8 times expandable / Height: 1/2*3, 1-8 times expandable
Touch Panel Resolution	40 x 30 keys / screen - 1 or 2 point touch
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out
Application	4MB EPROM (Approx. 1280 screens at 3.2KB/screen)
Data Backup	256KB SRAM — uses a lithium battery*4
Serial Interface (COM1)	Asynchronous Transmission: RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MPI: 187.5kbps)*5
Expansion Serial Interface (COM2)	Asynchronous Transmission: RS-232C Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 38.4kbps
Expansion Unit Interface 1	1ch, for Optional Communication Unit Connection
Expansion Unit Interface 2	1ch, for Optional Video-mix Unit Connection
Ethernet Interface	IEEE802.3, 10BASE-T
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F -During screen file development- Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. -During Operation- Used for a variety of devices, including a bar-code reader.
CF Card Interface	1 slot (CompactFlash™)
CF Card Expansion Interface	CF Card Front Maintenance Unit Connector
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6
AUX Input/Output	Remote Reset Input: 1 point Input Voltage: DC24V ± 10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point. Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16
Sound Output	External Speaker Connection (Terminal Block) Monaural 1CH Speaker Output: 70mW (Rated Load: 8W, Frequency: 1kHz) Sound Line Out Output: 2.7Vp-p (Rated Load: 10kW)

Model	GP2601-TC11
Display Type	TFT Color LCD
Display Colors	256 colors*1
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)
Display Resolution	800 x 600 pixels
Effective Display Area	W246mm [9.69in.] x H184.5mm [7.26in.]
Brightness Control	4 levels of adjustment available via touch panel
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts
Text	8 x 8 dots: 100 Char. x 75 rows 8 x 16 dots: 100 Char. x 37 rows 16 x 16 dots: 50 Char. x 37 rows 32 x 32 dots: 25 Char. x 18 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font
Font Sizes	Width: 1-8 times expandable / Height: 1/2*3, 1-8 times expandable
Touch Panel Resolution	40 x 30 keys / screen - 1 or 2 point selectable
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out
Application	4MB EPROM (Approx. 1280 screens at 3.2KB/screen)
Data Backup	128KB SRAM — uses a lithium battery*4
Serial Interface (COM1)	Asynchronous Transmission: RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MPI: 187.5kbps)*5
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F -During screen file development- Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. -During Operation- Used for a variety of devices, including a bar-code reader.
CF Card Interface	1 slot (CompactFlash™)
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6
AUX Input/Output *7	Remote Reset Input: 1 point Input Voltage: DC24V ± 10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point, External Buzzer Output -1 point Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16

*1 Changing the Colors setting to "256 colors" will disable the blinking feature on all screens in your project. If you wish to use the blinking feature, select "64 colors".
 *2 The font size varies depending on selected language and enlargement ratio.
 *3 Only available when using "12 Byte Character" settings via software. (Only Japanese, Chinese, Taiwanese, and Korean characters)
 *4 A Lithium battery's lifetime is:
 • 10 years when the battery's ambient temperature is 40°C or less.
 • 4.1 years when the battery's ambient temperature is 50°C or less.
 • 1.5 years when the battery's ambient temperature is 60°C or less.
 When used for back up:
 • Approximately 60 days, with a fully charged battery.
 • Approximately 6 days, with a half-charged battery.
 *5 SIEMENS SIMATIC S7-200/300/400 series (MPI port only).
 *6 Please contact your Pro-face sales representative for supported models and other details.
 *7 Printers with only Windows drivers cannot be used. However, certain types of printers with both Windows and DOS drivers can be used. For details, contact your local GP distributor.
 *8 Using the AUX Input/Output I/F requires the separately sold Screw Lock Terminal Block.

GENERAL SPECIFICATIONS

Model	GP2600-TC11	GP2600-TC41-24V	GP2601-TC11
Rated Voltage	AC100V to AC240V	DC24V	AC100V to AC240V
Rated Voltage Range	AC85V to AC265V	DC19.2V to DC28.8V	AC85V to AC265V
Power Consumption	50VA or less (ACIN100V) 85VA or less (ACIN240V)	50W or less	50VA or less (ACIN100V) 85VA or less (ACIN240V)
Allowable Voltage Drop	20ms or less	10ms or less	20ms or less
Voltage Endurance	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	AC1500V 20mA for 1 minute (between charging and FG terminals)
Insulation Resistance	10MΩ or higher at DC500V (between charging and FG terminals)		
Operating Temperature	0°C to +50°C*1		
Storage Temperature	-20°C to +60°C		
Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)		
Storage Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)		
Vibration Resistance	IEC61131-2 (JIS B 3502) 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 directions for 10 times (80min.)	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 directions for 10 times (80min.)
Noise Immunity (via noise simulator)	Noise Voltage: 1500Vp-p Pulse Duration: 1μs Arise Time: 1ns	Noise Voltage: 1000Vp-p Pulse Duration: 1μs Arise Time: 1ns	Noise Voltage: 1500Vp-p Pulse Duration: 1μs Arise Time: 1ns
Corrosive Gasses	Free of corrosive gasses		
Electrostatic Discharge Immunity	6kV (complies with EN 61000-4-2 Level 3)		
Certifications	EN55011 Class A, EN61000-3-2, EN61000-3-3, EN61000-6-2, EN60950, UL60950, UL1604	EN55011 Class A, EN61000-6-2, UL508, UL1604	EN55011 Class A, EN61000-3-2, EN61000-6-2, EN60950, UL60950, UL1604
Grounding	100Ω or less, or your country's applicable standard*2		
Ratings (For front panel of installed unit)	Equivalent to IP65f (JEM 1030)*3 / NEMA#250 TYPE4 X/12		
Cooling Method	Natural air circulation		
Weight	3.5kg (7.7lb) or less		
External Dimensions	W317mm [12.48in.] x H243mm [9.57in.] x D58mm [2.28in.]		
Panel Cutout Dimensions	301.5 ± 0.1 [11.87 ± 0.04] x 227.5 ± 0.1 [8.96 ± 0.01] (Panel thickness: 1.6mm [0.06in.] to 10mm [0.40in.])		

*1 When using GP-2600T/GP-2601T in an environment where the temperature exceeds 40°C for an extended period of time, the screen contrast level may decrease from its original level of brightness.
 *2 Grounding requirements differ from country to country. Be sure to confirm your work environment requirements prior to installation. For more information, please contact your Pro-face distributor.
 *3 The degree of protection provided by these products is equivalent to IP65f, however their performance cannot be guaranteed for every environment. Be sure to confirm your work environment requirements prior to installation.

GP 2500/2501 Series

Ethernet Model



GP-2500T



GP-2500S



GP-2500L

Cost-efficient Model



GP-2501T

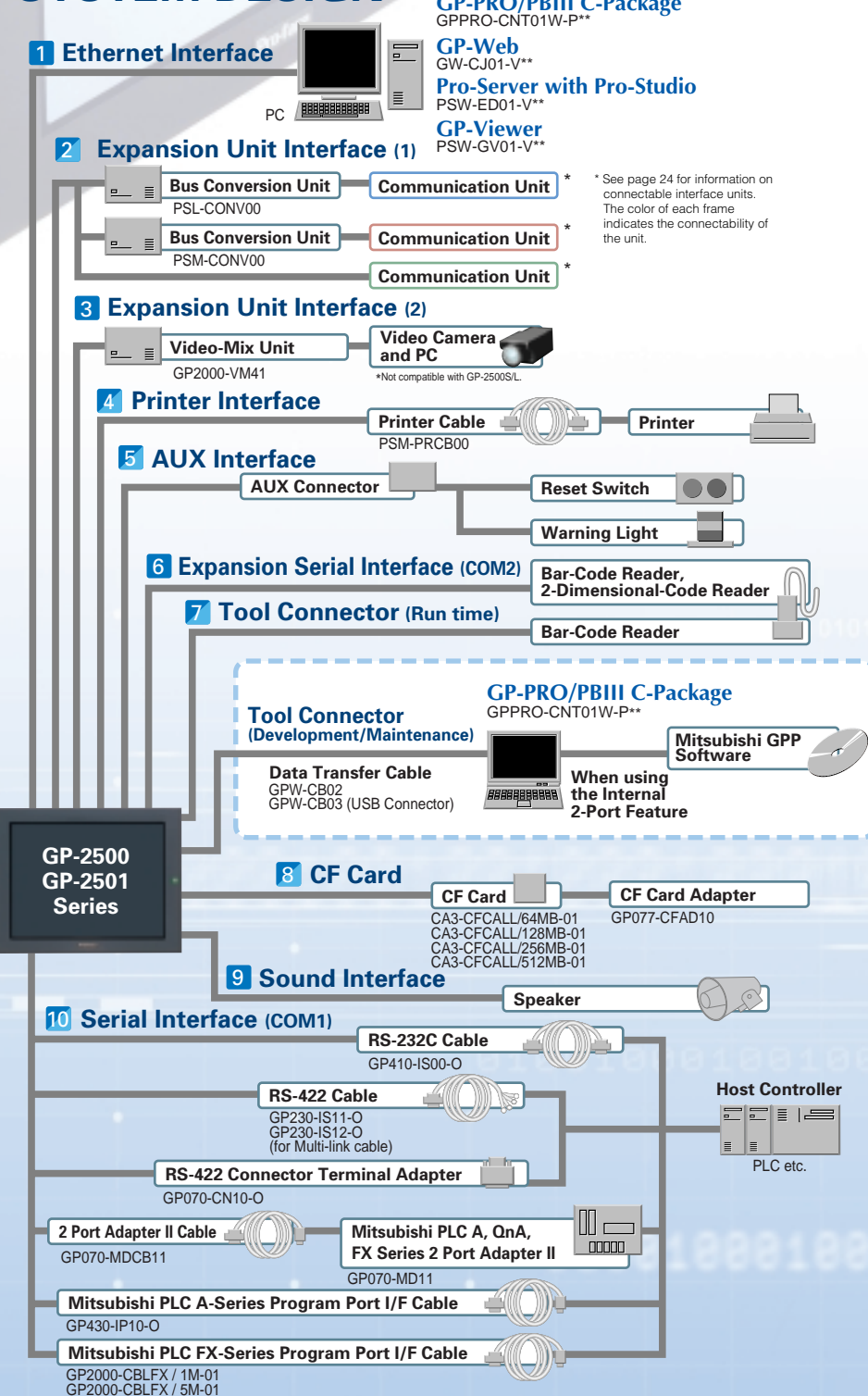


GP-2501S



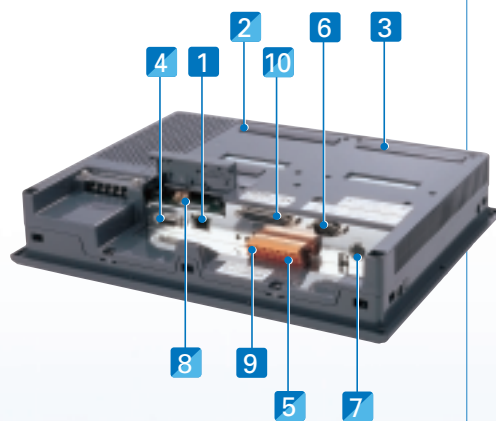
GP-2501L

SYSTEM DESIGN

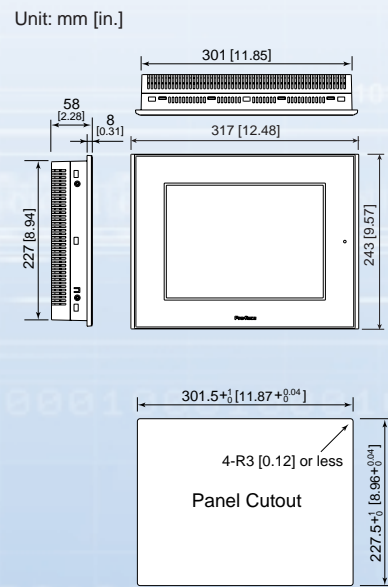


INTERFACES

- GP2500 Series Only.
- GP2500 and GP2501 Series can be used.



EXTERNAL DIMENSIONS



FUNCTIONAL SPECIFICATIONS

Model	GP2500-TC11 GP2500-TC41-24V	GP2500-SC41-24V	GP2500-LG41-24V
Display Type	TFT Color LCD	STN Color LCD	Monochrome LCD
Display Colors	256 colors *1	64 colors	Black and White or 8 Levels of Gray
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)	CCFL (Service life: 50,000 hrs. at 25°C and 24hr. Operation)	CCFL (Service life: 50,000 hrs. at 25°C and 24hr. Operation)
Display Resolution	640 x 480 pixels		
Effective Display Area	W211.2mm [8.34in.] x H158.4mm [6.24in.]		
Brightness Control	4 levels of adjustment available via touch panel		
Contrast Adjustment	8 levels of adjustment available via touch panel		
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6862 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangeul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts		
Text	8 x 8 dots	80 Char. x 60 rows	80 Char. x 60 rows
	8 x 16 dots	80 Char. x 30 rows	80 Char. x 30 rows
	16 x 16 dots	40 Char. x 30 rows	40 Char. x 30 rows
	32 x 32 dots	20 Char. x 15 rows	20 Char. x 15 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font		
Font Sizes	Width: 1~8 times expandable / Height: 1/2*3, 1~8 times expandable		
Touch Panel Resolution	32 x 24 keys / screen - 1 or 2 point touch		
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out		
Application	4MB FEPRAM (Approx. 1280 screens at 3.2KB/screen)		
Data Backup	256KB SRAM — uses a lithium battery*4		
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MP: 187.5kbps)*5		
Expansion Serial Interface (COM2)	Asynchronous Transmission : RS-232C, Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even, Data Transmission Speed: 2,400 bps to 38.4kbps		
Expansion Unit Interface 1	1ch, for Optional Video-mix Unit Connection		
Expansion Unit Interface 2	1ch, for Optional Video-mix Unit Connection		
Ethernet Interface	IEEE802.3, 10BASE-T		
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. <During Operation> Used for a variety of devices, including a bar-code reader.		
CF Card Interface	1 slot (CompactFlash™)		
CF Card Expansion Interface	CF Card Front Maintenance Unit Connector		
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers *6		
AUX Input/Output	Remote Reset Input: 1 point Input Voltage: DC24V±10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point, External Buzzer Output -1 point Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16		
Sound Output	External Speaker Connection (Terminal Block) Monaural 1CH Speaker Output: 70mW (Rated Load: 8Ω, Frequency: 1kHz) Sound Line Out Output: 2.7Vp-p (Rated Load: 10kΩ)		

Model	GP2501-TC11	GP2501-SC11	GP2501-LG41-24V
Display Type	TFT Color LCD	STN Color LCD	Monochrome LCD
Display Colors	256 colors *1	64 colors	Black and White or 8 Levels of Gray
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)	CCFL (Service life: 50,000 hrs. at 25°C and 24hr. Operation)	CCFL (Service life: 50,000 hrs. at 25°C and 24hr. Operation)
Display Resolution	640 x 480 pixels		
Effective Display Area	W211.2mm [8.34in.] x H158.4mm [6.24in.]		
Brightness Control	4 levels of adjustment available via touch panel		
Contrast Adjustment	8 levels of adjustment available via touch panel		
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6862 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangeul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts		
Text	8 x 8 dots	80 Char. x 60 rows	80 Char. x 60 rows
	8 x 16 dots	80 Char. x 30 rows	80 Char. x 30 rows
	16 x 16 dots	40 Char. x 30 rows	40 Char. x 30 rows
	32 x 32 dots	20 Char. x 15 rows	20 Char. x 15 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font		
Font Sizes	Width: 1~8 times expandable / Height: 1/2*3, 1~8 times expandable		
Touch Panel Resolution	32 x 24 keys / screen - 1 or 2 point selectable		
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out		
Application	2MB FEPRAM (Approx. 640 screens at 3.2KB/screen)		
Data Backup	128KB SRAM — uses a lithium battery*4		
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MP: 187.5kbps)*5		
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. <During Operation> Used for a variety of devices, including a bar-code reader.		
CF Card Expansion Interface	1 slot (CompactFlash™)		
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6		
AUX Input/Output *7	Remote Reset Input: 1 point Input Voltage: DC24V±10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point, External Buzzer Output -1 point Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16		

*1 Changing the Colors setting to "256 colors" will disable the blinking feature on all screens in your project. If you wish to use the blinking feature, select "64 colors".
 *2 The font size varies depending on selected language and enlargement ratio.
 *3 Only available when using "1/2 Byte Character" settings via software. (Only Japanese, Chinese, Taiwanese, and Korean characters)
 *4 A Lithium battery's lifetime is:
 • 10 years when the battery's ambient temperature is 40°C or less.
 • 4.1 years when the battery's ambient temperature is 50°C or less.
 • 1.5 years when the battery's ambient temperature is 60°C or less.
 When used for back up:
 • Approximately 60 days, with a fully charged battery.
 • Approximately 6 days, with a half-charged battery.
 *5 SIEMENS SIMATIC S7-200/300/400 series (MP port only)
 *6 Please contact your Pro-face sales representative for supported models and other details.
 *7 Printers with only Windows drivers cannot be used. However, certain types of printers with both Windows and DOS drivers can be used. For details, contact your local GP distributor.
 *8 Using the AUX Input/Output I/F requires the separately sold Screw Lock Terminal Block.

GENERAL SPECIFICATIONS

Model	GP2500-TC11	GP2500-TC41-24V	GP2500-SC41-24V	GP2500-LG41-24V	GP2501-TC11	GP2501-SC11	GP2501-LG41-24V	
Electrical	Rated Voltage	AC100V to AC240V	DC24V		AC100V to AC240V	AC240V	DC24V	
	Rated Voltage Range	AC85V to AC265V	DC19.2V to DC28.8V		AC85V to AC265V	DC19.2V to DC28.8V	DC19.2V to DC28.8V	
	Power Consumption	50VA or less (ACIN100V) 85VA or less (ACIN240V)	50W or less		50VA or less (ACIN100V) 85VA or less (ACIN240V)	50W or less	50W or less	
	Allowable Voltage Drop	20ms or less	10ms or less		20ms or less	10ms or less	10ms or less	
Environmental	Voltage Endurance	AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)		AC1500V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	AC1000V 20mA for 1 minute (between charging and FG terminals)	
	Insulation Resistance	10MΩ or higher at DC500V (between charging and FG terminals)						
	Operating Temperature	0°C to +50°C*1						
	Storage Temperature	-20°C to +60°C						
Structural	Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)						
	Storage Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)						
	Vibration Resistance	IEC61131-2 (JIS B 3502) 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 directions for 10 times (80min.)		
	Noise Immunity (via noise simulator)	Noise Voltage: 1500Vp-p Pulse Duration: 1μs Arise Time: 1ns		Noise Voltage: 1000Vp-p Pulse Duration: 1μs Arise Time: 1ns		Noise Voltage: 1500Vp-p Pulse Duration: 1μs Arise Time: 1ns		Noise Voltage: 1000Vp-p Pulse Duration: 1μs Arise Time: 1ns
Corrosive Gasses	Free of corrosive gasses							
Electrostatic Discharge Immunity	6kV (complies with EN 61000-4-2 Level 3)							
Certifications	EN55011 Class A, EN61000-3-2, EN61000-3-3, EN61000-6-2, EN60950, UL60950, UL1604		EN55011 Class A, EN61000-6-2, UL508, UL1604		EN55011 Class A, EN61000-3-2, EN61000-3-3, EN61000-6-2, EN60950, UL60950, UL1604		EN55011 Class A, EN61000-6-2, UL508, UL1604	
Grounding	100Ω or less, or your country's applicable standard*2							
Ratings (For front panel of installed unit)	Equivalent to IP65 (JEM 1030)*3 / NEMA#250 TYPE4 X12							
Cooling Method	Natural air circulation							
Weight	3.5kg (7.7lb) or less							
External Dimensions	W317mm [12.48in.] x H243mm [9.57in.] x D58mm [2.28in.]							
Panel Cutout Dimensions	301.5 ± 0.1mm [11.87 ± 0.01in.] x 227.5 ± 0.1mm [8.96 ± 0.01in.] (Panel thickness: 1.6mm [0.06in.] to 10mm [0.40in.])							

*1 When using GP-2500L/GP-2500S/GP-2501L/GP-2501S in an environment where the temperature exceeds 40°C for an extended period of time, the screen contrast level may decrease from its original level of brightness.
 *2 Grounding requirements differ from country to country. Be sure to confirm your work environment requirements prior to installation. For more information, please contact your Pro-face distributor.
 *3 The degree of protection provided by these products is equivalent to IP65, however their performance cannot be guaranteed for every environment. Be sure to confirm your work environment requirements prior to installation.

GP2400/2401 Series

Ethernet Model



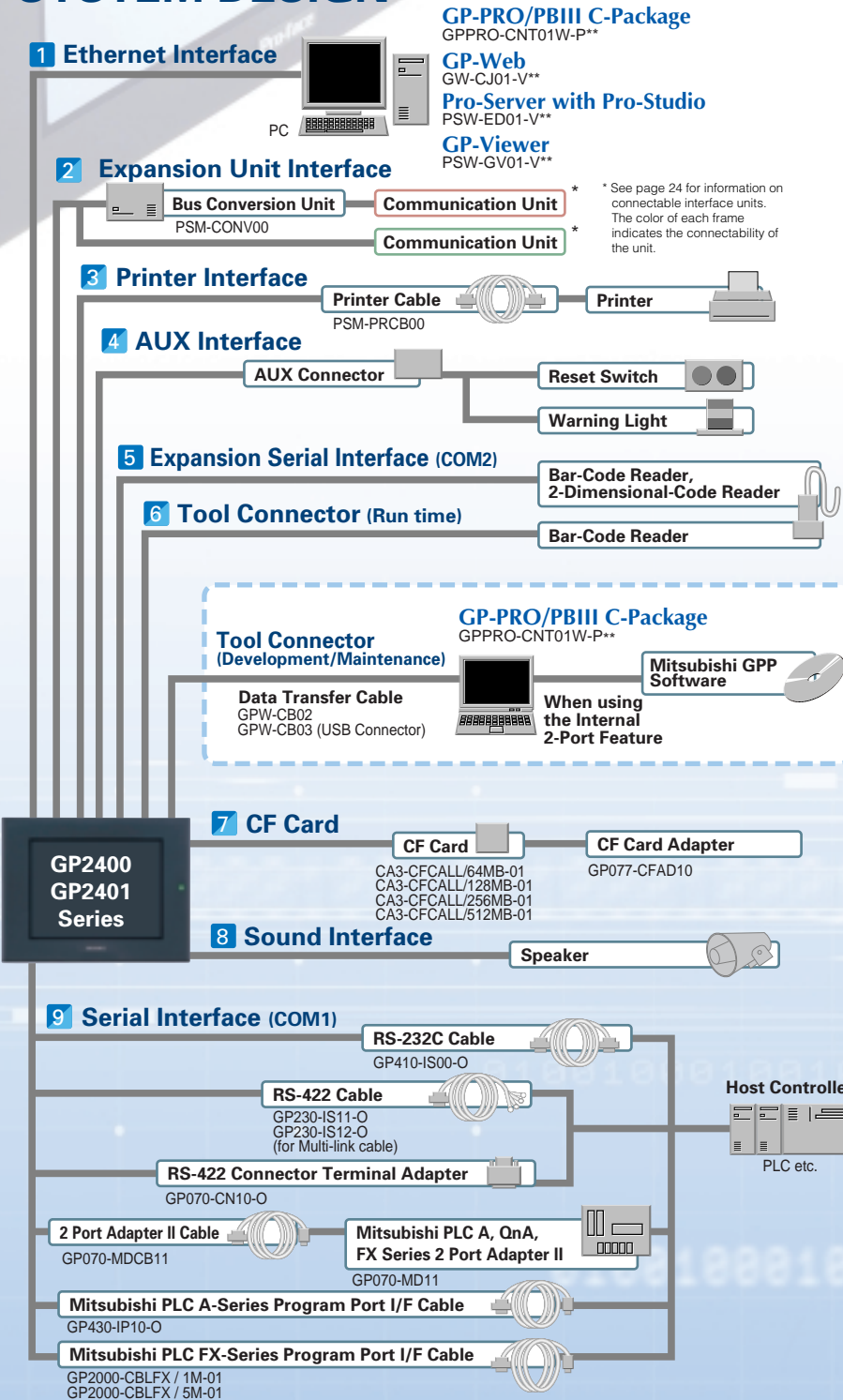
GP-2400T

Cost-efficient Model



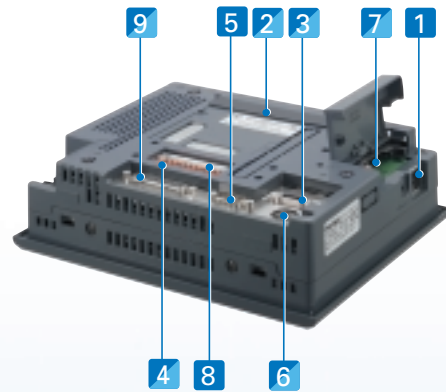
GP-2401T

SYSTEM DESIGN

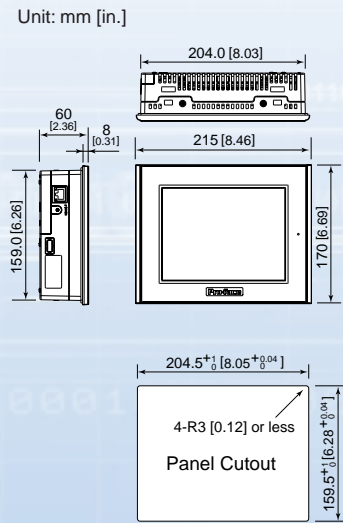


INTERFACES

- GP2400 Series Only.
- GP2400 and GP2401 Series can be used.



EXTERNAL DIMENSIONS



FUNCTIONAL SPECIFICATIONS

Model	GP2400-TC41-24V
Display Type	TFT Color LCD
Display Colors	256 colors *1
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)
Display Resolution	640 x 480 pixels
Effective Display Area	W149.8mm [5.90in.] x H112.3mm [4.42in.]
Brightness Control	4 levels of adjustment available via touch panel
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangeul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts
Text	8 x 8 dots 80 Char. x 60 rows 8 x 16 dots 80 Char. x 30 rows 16 x 16 dots 40 Char. x 30 rows 32 x 32 dots 20 Char. x 15 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font
Font Sizes	Width: 1-8 times expandable / Height: 1/2 ³ , 1-8 times expandable
Touch Panel Resolution	32 x 24 keys / screen - 1 or 2 point touch
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out
Memory	Application 4MB FEPRAM (Approx. 1280 screens at 3.2KB/screen) Data Backup 256KB SRAM — uses a lithium battery*4
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length : 7 or 8 bits Stop Bit : 1 or 2 bits Parity : None, Odd or Even Data Transmission Speed : 2,400bps to 115.2kbps (MPI: 187.5kbps)*5
Expansion Serial Interface (COM2)	Asynchronous Transmission : RS-232C Data Length : 7 or 8 bits Stop Bit : 1 or 2 bits Parity : None, Odd or Even Data Transmission Speed : 2,400bps to 38.4kbps
Ethernet Interface	IEEE802.3, 10BASE-T
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. <During Operation> Used for data transfer with the 2-Port feature. Used for a variety of devices, including a bar-code reader.
CF Card Interface	1 slot (CompactFlash™)
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6
AUX Input/Output	Remote Reset Input: 1 point Input Voltage: DC24V +/-10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point, External Buzzer Output -1 point Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16
Sound Output	External Speaker Connection (Terminal Block) Monaural 1CH Speaker Output: 70mW (Rated Load: 8W, Frequency: 1kHz) Sound Line Out Output: 2.7Vp-p (Rated Load: 10kW)

Model	GP2401-TC41-24V
Display Type	TFT Color LCD
Display Colors	256 colors *1
Backlight	User replaceable CCFL (Service life: 50,000 hrs. at 25°C and 24hr. operation)
Display Resolution	640 x 480 pixels
Effective Display Area	W149.8mm [5.90in.] x H112.3mm [4.42in.]
Brightness Control	4 levels of adjustment available via touch panel
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangeul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts
Text	8 x 8 dots 80 Char. x 60 rows 8 x 16 dots 80 Char. x 30 rows 16 x 16 dots 40 Char. x 30 rows 32 x 32 dots 20 Char. x 15 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font
Font Sizes	Width: 1-8 times expandable / Height: 1/2 ³ , 1-8 times expandable
Touch Panel Resolution	32 x 24 keys / screen - 1 or 2 point selectable
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out
Memory	Application 2MB FEPRAM (Approx. 640 screens at 3.2KB/screen) Data Backup 128KB SRAM — uses a lithium battery*4
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length : 7 or 8 bits Stop Bit : 1 or 2 bits Parity : None, Odd or Even Data Transmission Speed : 2,400bps to 115.2kbps (MPI: 187.5kbps)*5
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. <During Operation> Used for data transfer with the 2-Port feature. Used for a variety of devices, including a bar-code reader.
CF Card Interface	1 slot (CompactFlash™)
Printer Interface	Compatible with NEC PC-PR201/PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6
AUX Input/Output *7	Remote Reset Input: 1 point Input Voltage: DC24V +/-10%, Input Current: 4mA (TYP), Min. Input Pulse Width: 2ms Operating Voltage: (When ON) Min. DC21.2V, (When OFF) Max. DC3V Isolation Method: Photocoupler Isolation Output -3 Points: RUN Output -1 point, System Alarm Output -1 point, External Buzzer Output -1 point Rated Voltage: DC24V Rated Current: 50mA/point Wire Gauge: AWG28 to AWG16

*1 Changing the Colors setting to "256 colors" will disable the blinking feature on all screens in your project. If you wish to use the blinking feature, select "64 colors".
 *2 The font size varies depending on selected language and enlargement ratio.
 *3 Only available when using "1/2 Byte Character" settings via software. (Only Japanese, Chinese, Taiwanese, and Korean characters)
 *4 A Lithium battery's lifetime is:
 • 10 years when the battery's ambient temperature is 40°C or less.
 • 4.1 years when the battery's ambient temperature is 50°C or less.
 • 1.5 years when the battery's ambient temperature is 60°C or less.
 When used for back up:
 • Approximately 60 days, with a fully charged battery.
 • Approximately 6 days, with a half-charged battery.
 *5 SIEMENS SIMATIC S7-200/300/400 series (MPI port only)
 *6 Please contact your Pro-face sales representative for supported models and other details.
 *7 Printers with only Windows drivers cannot be used. However, certain types of printers with both Windows and DOS drivers can be used. For details, contact your local GP distributor.
 *8 Using the AUX Input/Output I/F requires the separately sold Screw Lock Terminal Block.

GENERAL SPECIFICATIONS

Model	GP2400-TC41-24V	GP2401-TC41-24V
Electrical	Rated Voltage	DC24V
	Rated Voltage Range	DC19.2V to DC28.8V
	Power Consumption	28W or less
	Allowable Voltage Drop	10ms or less
Environmental	Voltage Endurance	AC1000V 20mA for 1 minute (between charging and FG terminals)
	Insulation Resistance	10MΩ or higher at DC500V (between charging and FG terminals)
	Operating Temperature	0°C to +50°C
	Storage Temperature	-20°C to +60°C
	Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)
	Storage Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature: 39°C or less)
Mechanical	Vibration Resistance	IEC61131-2 (JIS B 3502) 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 directions for 10 times (80min.)
	Noise Immunity (via noise simulator)	Noise Voltage: 1000Vp-p Pulse Duration: 1 μs Arise Time: 1ns
	Corrosive Gasses	Free of corrosive gasses
	Electrostatic Discharge Immunity	6kV (complies with EN 61000-4-2 Level 3)
Structural	Certifications	EN55011 Class A, EN61000-6-2, UL508, UL1604
	Grounding	100Ω or less, or your country's applicable standard*1
	Ratings (For front panel of installed unit)	Equivalent to IP65f (JEM 1030)*2 / NEMA#250 TYPE4 X/12
	Cooling Method	Natural air circulation
	Weight	1.7kg (5.5lb) or less
External Dimensions	W215mm [8.46in.] x H170mm [6.69in.] x D60mm [2.36in.]	
Panel Cutout Dimensions	204.5 *1mm [8.05 *1in.] x 159.5 *1mm [6.28 *1in.] (Panel thickness: 1.6mm [0.06in.] to 10mm [0.40in.])	

*1 Grounding requirements differ from country to country. Be sure to confirm your work environment requirements prior to installation. For more information, please contact your Pro-face distributor.
 *2 The degree of protection provided by these products is equivalent to IP65f, however their performance cannot be guaranteed for every environment. Be sure to confirm your work environment requirements prior to installation.

GP 2300/2301 Series

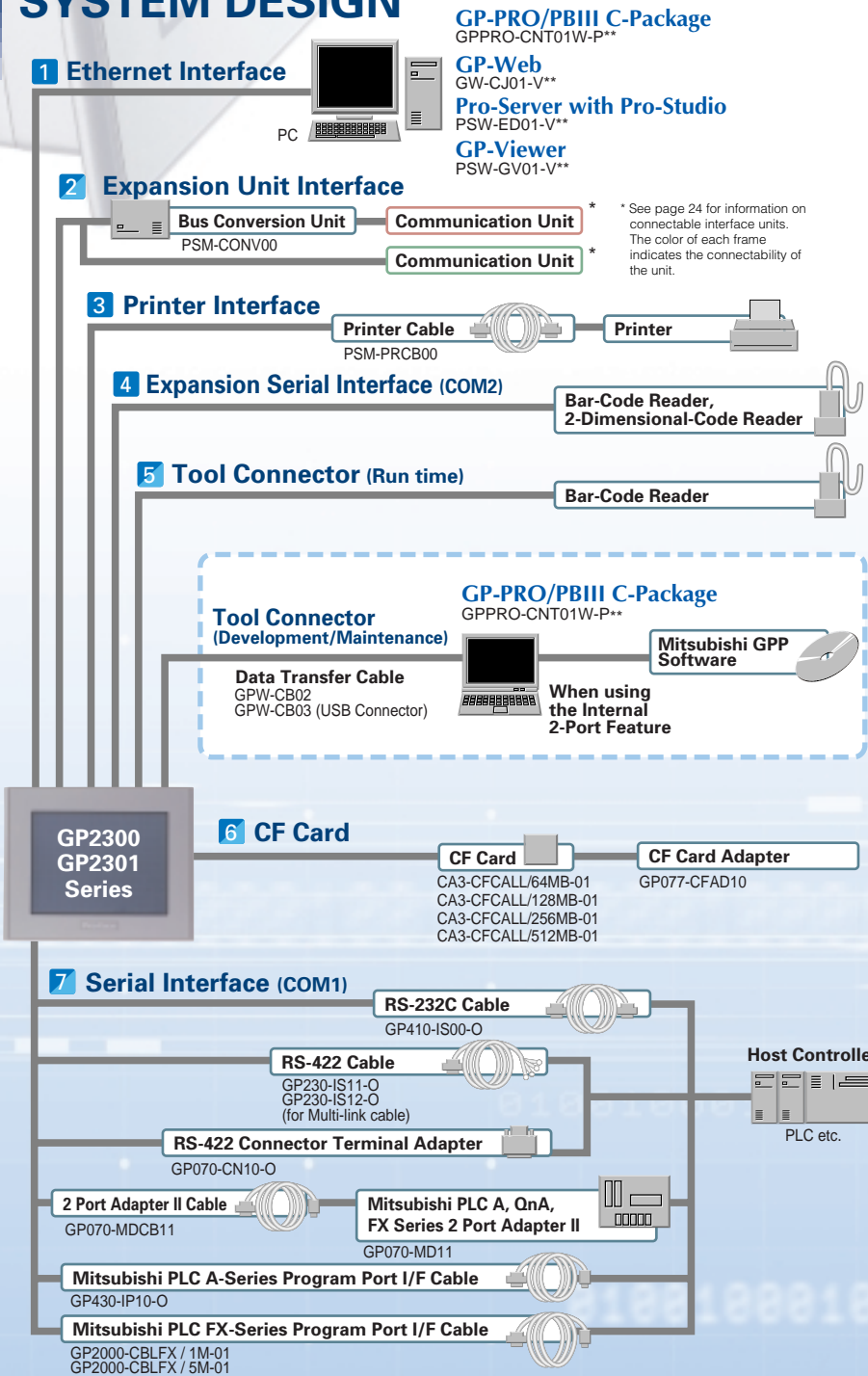
Ethernet Model



Cost-efficient Model

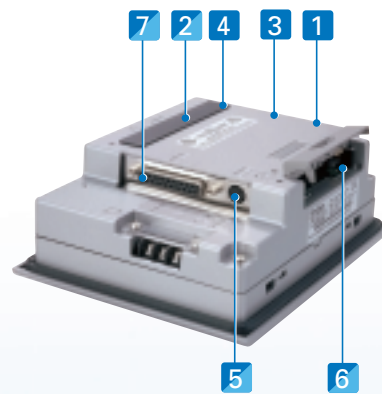


SYSTEM DESIGN

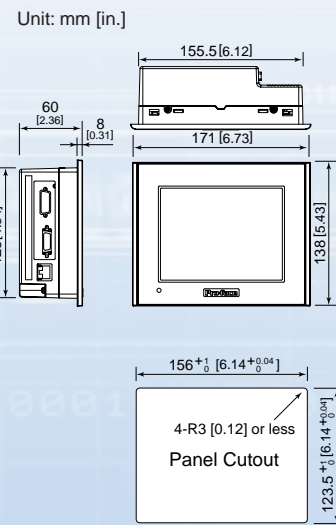


INTERFACES

- GP2300 Series Only.
- GP2300 and GP2301 Series can be used.



EXTERNAL DIMENSIONS



FUNCTIONAL SPECIFICATIONS

Model	GP2300-TC41-24V	GP2300-SC41-24V	GP2300-LG41-24V
Display Type	TFT Color LCD	STN Color LCD	Monochrome LCD
Display Colors	256 colors *1	64 colors	Black and White or 8 Levels of Gray
Backlight	CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)	User replaceable CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)	User replaceable CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)
Display Resolution	320 x 240 pixels		
Effective Display Area	W115.2mm [4.54in.] x H86.4mm [3.40in.]		
Brightness Control	4 levels of adjustment available via touch panel		
Contrast Adjustment	8 levels of adjustment available via touch panel		
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts		
Text	8 x 8 dots 8 x 16 dots 16 x 16 dots 32 x 32 dots	40 Char. x 30 rows 40 Char. x 15 rows 20 Char. x 15 rows 10 Char. x 7 rows	40 Char. x 30 rows 40 Char. x 15 rows 20 Char. x 15 rows 10 Char. x 7 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font		
Font Sizes	Width: 1~8 times expandable / Height: 1/2*3, 1~8 times expandable		
Touch Panel Resolution	16 x 12 keys / screen - 1 or 2 point touch selectable		
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out		
Memory	Application: 2MB FEPRAM (Approx. 640 screens at 3.2KB/screen) Data Backup: 256KB SRAM — uses a rechargeable lithium battery*4		
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MPI: 187.5kbps)*5		
Expansion Serial Interface (COM2)	Asynchronous Transmission : RS-232C Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400 bps to 38.4kbps		
Ethernet Interface	IEEE802.3, 10BASE-T		
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. <During Operation> Used for a variety of devices, including a bar-code reader.		
CF Card Interface	1 slot (CompactFlash™)		
Printer Interface	Compatible with NEC PC-PR201, PL, EPSON ESC/P24-J84(C), HP Laser Jet PCL 4 command, EPSON PM/Stylus (6-color ink), EPSON Stylus (4-color ink) compatible printers*6		

Model	GP2301-TC41-24V	GP2301-SC41-24V	GP2301-LG41-24V
Display Type	TFT Color LCD	STN Color LCD	Monochrome LCD
Display Colors	256 colors *1	64 colors	Black and White or 8 Levels of Gray
Backlight	CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)	User replaceable CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)	User replaceable CCFL (Service life: 50,000 hrs. at 25 °C and 24hr. operation)
Display Resolution	320 x 240 pixels		
Effective Display Area	W115.2mm [4.54in.] x H86.4mm [3.40in.]		
Brightness Control	4 levels of adjustment available via touch panel		
Contrast Adjustment	8 levels of adjustment available via touch panel		
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts		
Text	8 x 8 dots 8 x 16 dots 16 x 16 dots 32 x 32 dots	40 Char. x 30 rows 40 Char. x 15 rows 20 Char. x 15 rows 10 Char. x 7 rows	40 Char. x 30 rows 40 Char. x 15 rows 20 Char. x 15 rows 10 Char. x 7 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font		
Font Sizes	Width: 1~8 times expandable / Height: 1/2*3, 1~8 times expandable		
Touch Panel Resolution	16 x 12 keys / screen - 1 or 2 point touch selectable		
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out		
Memory	Application: 1MB FEPRAM (Approx. 320 screens at 3.2KB/screen) Data Backup: 128KB SRAM — uses a rechargeable lithium battery*4		
Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kbps (MPI: 187.5kbps)*5		
Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature. <During Operation> Used for a variety of devices, including a bar-code reader.		
CF Card Interface	1 slot (CompactFlash™)		

*1 Changing the Colors setting to "256 colors" will disable the blinking feature on all screens in your project. If you wish to use the blinking feature, select "64 colors".
 *2 The font size varies depending on selected language and enlargement ratio.
 *3 Only available when using "1/2 Byte Character" settings via software. (Only Japanese, Chinese, Taiwanese, and Korean characters)
 *4 A Lithium battery's lifetime is:
 • 10 years when the battery's ambient temperature is 40°C or less.
 • 4.1 years when the battery's ambient temperature is 50°C or less.
 • 1.5 years when the battery's ambient temperature is 60°C or less.
 When used for back up:
 • Approximately 60 days, with a fully charged battery.
 • Approximately 6 days, with a half-charged battery.
 *5 SIEMENS SIMATIC S7-200/300/400 series (MPI port only).
 *6 Please contact your Pro-face sales representative for supported models and other details.
 *6 Printers with only Windows drivers cannot be used. However, certain types of printers with both Windows and DOS drivers can be used. For details, contact your local GP distributor.

GENERAL SPECIFICATIONS

Model	GP2300-TC41-24 V	GP2300-SC41-24V	GP2300-LG41-24V	GP2301-TC41-24 V	GP2301-SC41-24V	GP2301-LG41-24V
Rated Voltage	DC24V					
Rated Voltage Range	DC19.2V to DC28.8V					
Power Consumption	22W or less					
Allowable Voltage Drop	10ms or less					
Voltage Endurance	AC1000V 20mA for 1 minute (between charging and FG terminals)					
Insulation Resistance	20MΩ or higher at DC500V (between charging and FG terminals)					
Operating Temperature	0°C to +50°C*1					
Storage Temperature	-20°C to +60°C					
Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature:39°C or less)					
Storage Humidity	10%RH to 90%RH (Non-condensing, wet bulb temperature:39°C or less)					
Vibration Resistance	IEC61131-2 (JIS B 3502) 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 directions for 10 times (80min.)					
Noise Immunity (via noise simulator)	Noise Voltage: 1000Vp-p Pulse Duration: 1 μs Arise Time: 1ns					
Corrosive Gasses	Free of corrosive gasses					
Electrostatic Discharge Immunity	6kV (complies with EN 61000-4-2 Level 3)					
Certifications	EN55011 Class A, EN61000-6-2, UL60950, UL1604 100Ω or less, or your country's applicable standard*2					
Grounding	Equivalent to IP65f (JEM 1030)*3 / NEMA#250 TYPE4 X/12					
Ratings (For front panel of installed unit)	Natural air circulation					
Cooling Method	1.2kg (2.65lb) or less					
Weight	W171mm[6.73in.] x H138mm[5.43in.] x D60mm[2.36in.]					
External Dimensions	156*1mm [6.14**in.] x 123.5*1mm [4.86**in.] (Panel thickness: 1.6mm[0.06in.] to 5mm[0.2in.])					
Panel Cutout Dimensions						

*1 The LCD displays of GP-2300L, GP-2300S, GP-2301L and GP-2301S may occasionally blur when they are used for hours at over 40°C ambient operating temperature. This is a temporary phenomenon. After the temperature returns to normal, the display will be restored to normal. The GP's operation will not be affected even though the display is blurred.

*2 Grounding requirements differ from country to country. Be sure to confirm your work environment requirements prior to installation. For more information, please contact your Pro-face distributor.

*3 The degree of protection provided by these products is equivalent to IP65f, however their performance cannot be guaranteed for every environment. Be sure to confirm your work environment requirements prior to installation.

GP2000H Series



GP-2401HT

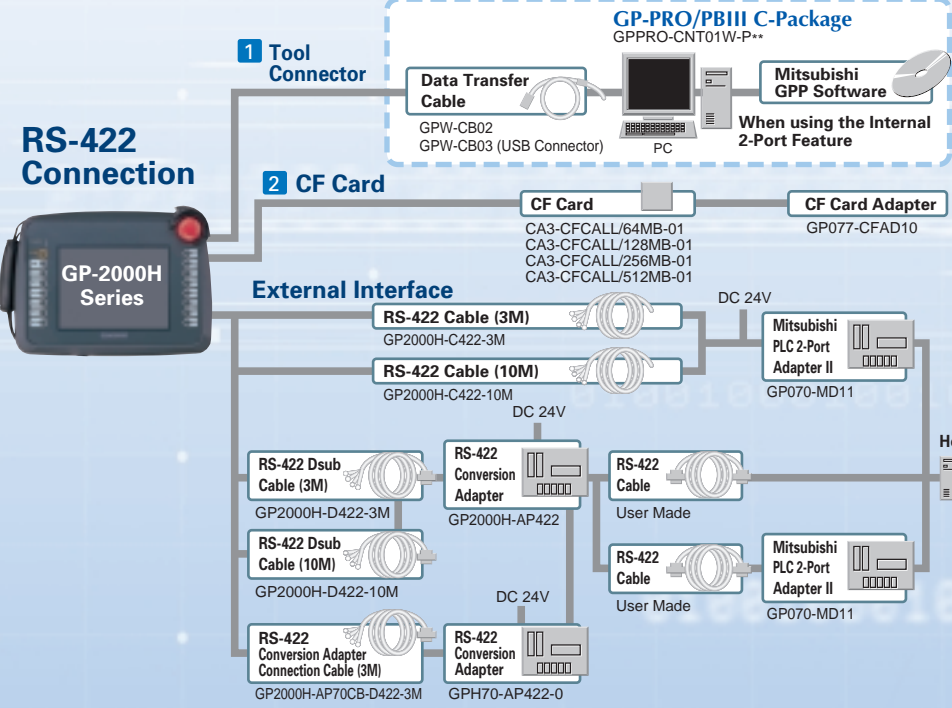
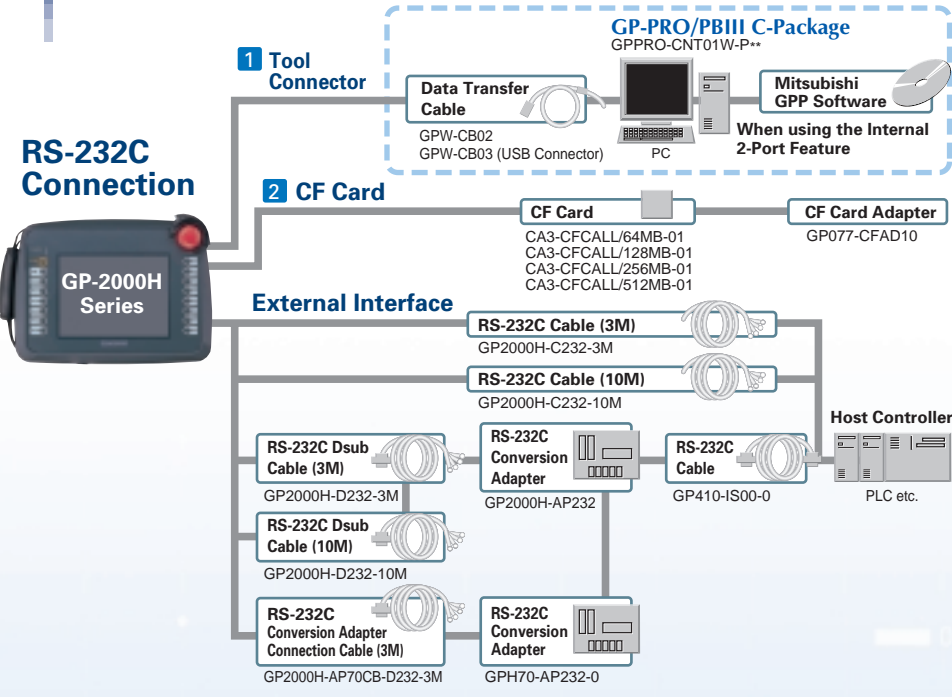


GP-2301HS



GP-2301HL

SYSTEM DESIGN



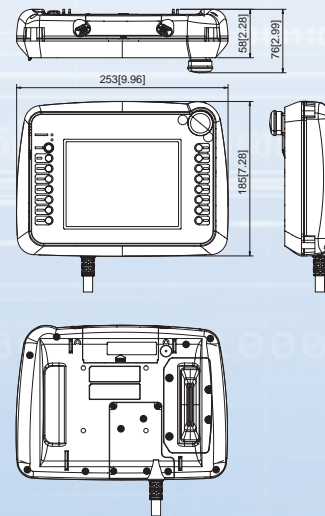
INTERFACES



* Photo shows GP-2301H*

EXTERNAL DIMENSIONS

Unit: mm [in.]



FUNCTIONAL SPECIFICATIONS

Model	GP2401H-TC41-24V	GP2301H-SC41-24V	GP2301H-LG41-24V
Display Type	TFT Color LCD	STN Color LCD	Monochrome LCD
Display Colors	256 colors *1	64 colors	Black and White or 8 Levels of Gray
Backlight	CCFL (Service life: 50,000hrs, at 25°C and 24hr. operation)		
Display Resolution	640x 480 pixels	320 x 240 pixels	
Effective Display Area	W132.5mm [5.22in.] x H99.4mm [3.91in.]	W115.2mm [4.54in.] x H86.4mm [3.40in.]	
Brightness Control	4 levels of adjustment available via touch panel		
Contrast Adjustment	8 levels of adjustment available via touch panel.		
Language Fonts	ASCII: (Code page 850) Alphanumeric (including European characters) Chinese: (GB2312-80 codes) simplified Chinese fonts Japanese: ANK 158, Kanji: 6962 (JIS Standards 1 and 2) Korean: (KSC5601-1992 codes) Hangul fonts Taiwanese: (Big 5 codes) traditional Chinese fonts		
Text	8 x 8 dots	80 Char. x 60 rows	40 Char. x 30 rows
	8 x 16 dots	80 Char. x 30 rows	40 Char. x 15 rows
	16 x 16 dots	40 Char. x 30 rows	20 Char. x 15 rows
	32 x 32 dots	20 Char. x 15 rows	10 Char. x 7 rows
Character Sizes*2	8 x 8 dot font, 8 x 16 dot font, 16 x 16 dot font, 32 x 32 dot font		
Font Sizes	Width: 1~8 times expandable / Height: 1/2*3, 1~8 times expandable		
Touch Panel Resolution	32 x 24 keys / screen - 1 or 2 point selectable	16 x 12 keys / screen - 1 or 2 point touch selectable	
Operation Status LED	Green : Normal Operation; Orange : Backlight Burn-out		
Memory	Application	2MB FEPRAM (Approx. 640 screens at 3.2KB/screen)	1MB FEPRAM (Approx. 320 screens at 3.2KB/screen)
	Data Backup	128KB SRAM - uses a lithium battery*4	
Function Switches	15 (DOUT Output: F1, F2)	11 (DOUT Output: F1, F2)	
Operation Switches	Function Switch (O.P Key) (DOUT Output)		
External Interfaces	DOUT Output	2-point (F1, F2) open collector output Rated voltage: DC24V Rated current: 300mA/point Max.	
	Operation Output	1-point (F1, F2) open collector output Rated voltage: DC24V Rated current: 300mA/point Max.	
	Buzzer Output	1-point (F1, F2) open collector output Rated voltage: DC24V Rated current: 300mA/point Max.	
	Emergency Switch Output	2 Contacts (NC) Rated Voltage: DC 30V Rated Current: 1A max. (Applicable Load: 1mA DC 5V min.) Open Collector Output: 1 point Rated voltage: DC 24V Rated Current: 300mA max.	
	3-Position Enable Switch Output	2 Contacts (NO)*5 Rated Voltage: DC 24V Rated Current: 300mA max. (Applicable Load: 4mA DC 24V min.)	
	Serial Interface (COM1)	Asynchronous Transmission : RS-232C/RS-422 Data Length: 7 or 8 bits Stop Bit: 1 or 2 bits Parity: None, Odd or Even Data Transmission Speed: 2,400bps to 115.2kpbs (MPI: 187.5kpbs)*6	
	Tool Connector Interface	Asynchronous TTL level nonprocedural command I/F <During screen file development> Used for transferring data to and from the GP application software and the GP. Used for data transfer with the 2-Port feature.	
	CF Card Interface	1 slot (CompactFlash™)	

*1 Changing the "Colors" setting to "256 color" will disable the blinking feature on all screens in your project. If you wish to use the blinking feature, select "64 colors".
 *2 The font size varies depending on selected language and enlargement ratio.
 *3 Only available when using "12 2 Byte Character" settings via software. (Only Japanese, Chinese, Taiwanese, and Korean characters)
 *4 A Lithium battery's lifetime is :
 • 10 years when the battery's ambient temperature is 40°C or less.
 • 4.1 years when the battery's ambient temperature is 50°C or less.
 • 1.5 years when the battery's ambient temperature is 60°C or less.
 When used for backup :
 • Approximately 60 days, with a fully charged battery.
 • Approximately 6 days, with a half-charged battery.
 *5 When GP-H70 Compatibility mode is selected, 1 Contact (NO).
 *6 SIEMENS SIMATIC S7-200/300/400 series (MPI port only). Please contact your Pro-face sales representative for supported models and other details.

GENERAL SPECIFICATIONS

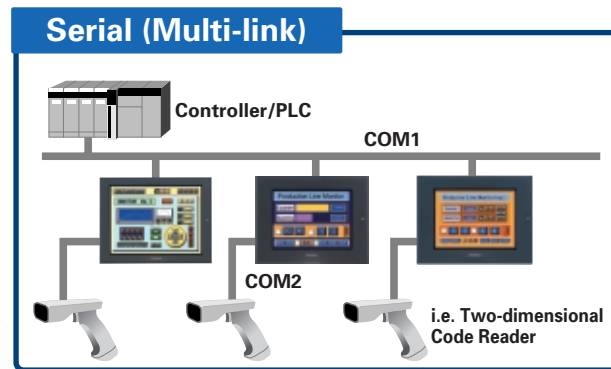
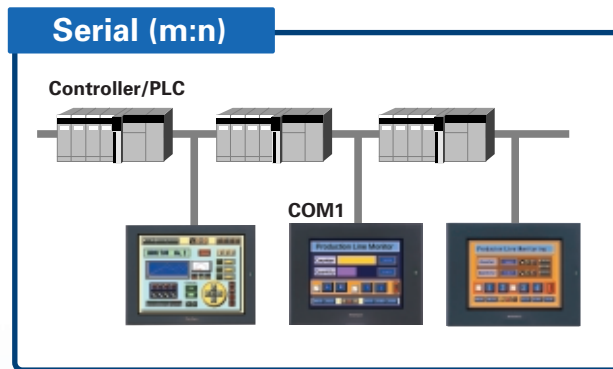
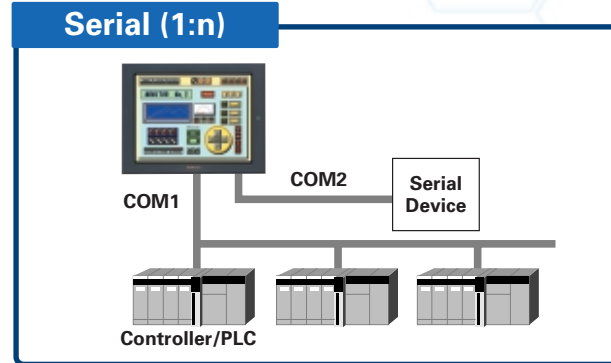
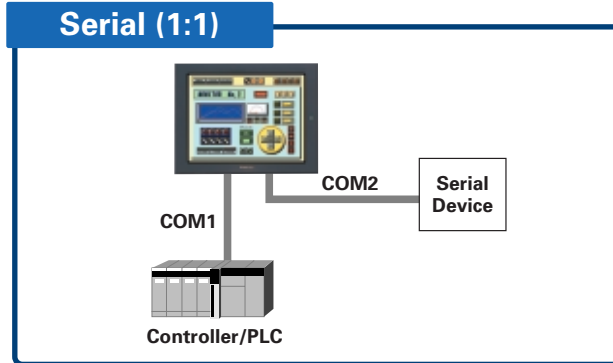
Model	GP2401H-TC41-24V	GP2301H-SC41-24V	GP2301H-LG41-24V
Electrical	Rated Voltage	DC24V	
	Rated Voltage Range	DC19.2V to DC28.8V	
	Power Consumption	15W max.	
	Allowable Voltage Drop	10ms max.	
Environmental	Voltage Endurance	AC 500V 20mA for 1 minute (between charging and FG terminals)	
	Insulation Resistance	20MΩ or more at DC500V (between charging and FG terminals)	
	Operating Temperature	0°C to +40°C	
	Storage Temperature	-20°C to +60°C	
Environmental	Humidity	10%RH to 90%RH (non-condensing, wet bulb temperature: 39°C or less)	
	Storage Humidity	10%RH to 90%RH (non-condensing, wet bulb temperature: 39°C or less)	
	Vibration Resistance	IEC61131-2 (JIS B 3502) 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; 10 times (80min.) for each (X, Y, Z) direction	
	Shock Resistance	IEC61131-2 (JIS B 3502) compliant, 147m/s² Release time: 1ms, Twice for each (X, Y, Z) direction	
	Drop Resistance	IEC61131-2 (JIS B 3502) compliant (1.0-meter drop, twice)	
	Noise Immunity (via noise simulator)	Noise Voltage: 1000Vp-p Pulse Duration: 1 μs Arise Time: 1ns	
	Corrosive Gasses	Free of corrosive gasses	
	Electrostatic Discharge Immunity	6kV (EN61000-4-2 Level 3)	
	Certifications	EN55011 Class A, EN61000-6-2, UL60950	
	Grounding	100Ω Max., or your country's applicable standard*1	
Structural	Rating (For front face of installed unit)	Equivalent to IP65f (JEM1030) / NEMA #250 TYPE 4X/12*2	
	Cooling Method	Natural air circulation	
	Weight	1.2kg (2.65lb)	
External Dimensions	W253mm[9.96in.] x H185mm[7.28in.] x D58mm[2.28in.] (excluding projections)		

*1 Grounding requirements differ from country to country. Be sure to confirm your work environment requirements prior to installation.
 For more information, please contact your Pro-face distributor.
 *2 The degree of protection provided by these products is equivalent to IP65f, however their performance cannot be guaranteed for every environment. Be sure to confirm your work environment requirements prior to installation.

Communication Connectivity

SERIAL CONNECTIONS

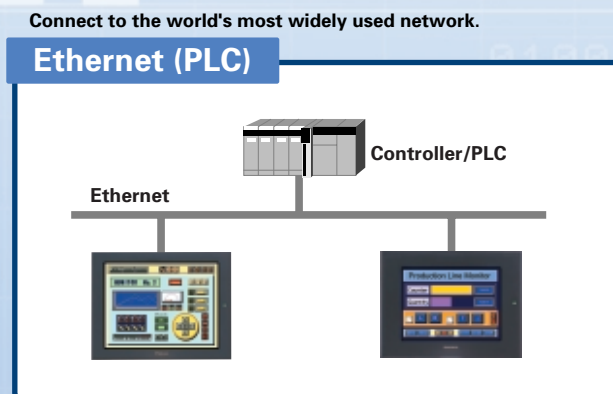
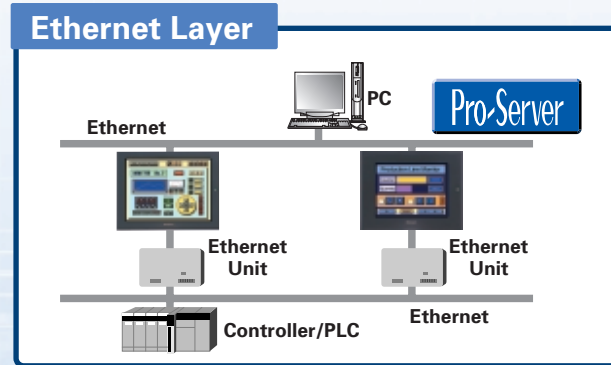
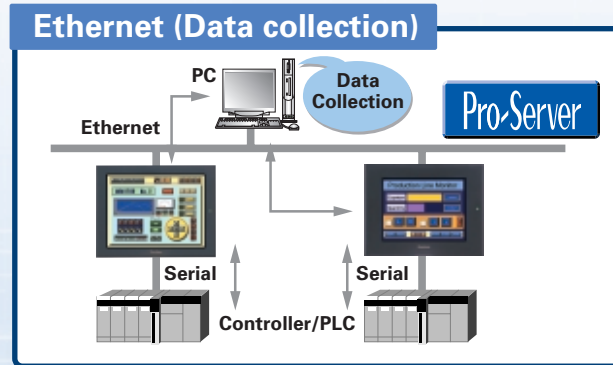
Use the RS-232C/RS-422 communication port to connect at up to 115.2 kbps to over 600 different PLCs and controllers.



Worldwide Controllers Supported Page ► 18
* Supported connection methods depends on a used controller and driver.

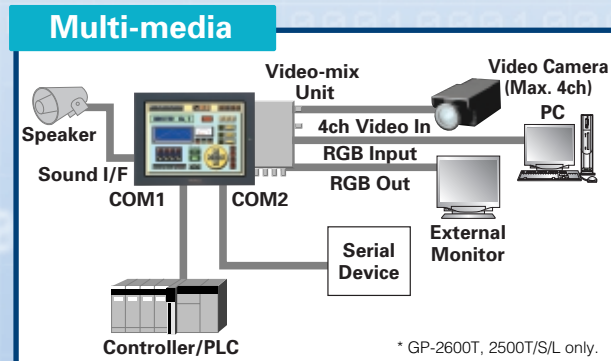
ETHERNET NETWORK

The Pro-Server with Pro-Studio software allows the host PC to collect PLC data via GP to common applications, such as Microsoft Excel or Access database.



VIDEO-MIX CONNECTION

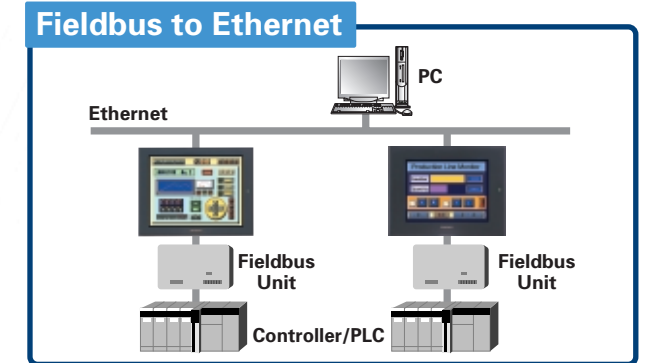
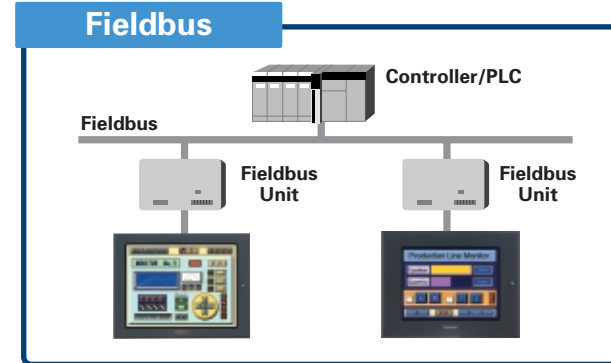
Display images from external video cameras and PCs on a single unit, and output the GP screen display to an external monitor.



* GP-2600T, 2500T/S/L only.

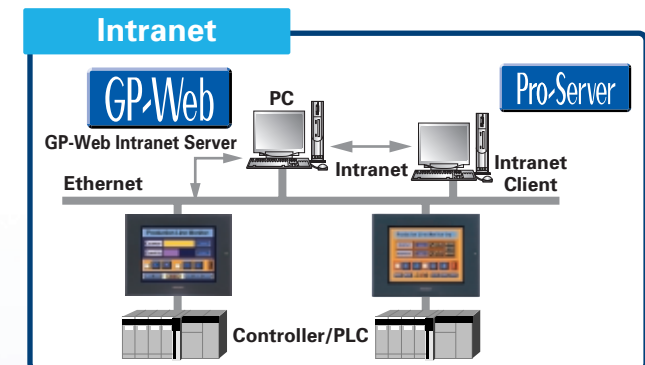
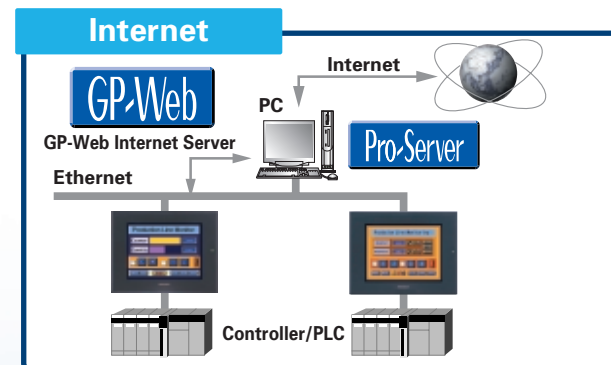
FIELDBUS CONNECTIONS

Attach an optional network unit and connect your GP to a variety of field networks.



REMOTE MONITORING

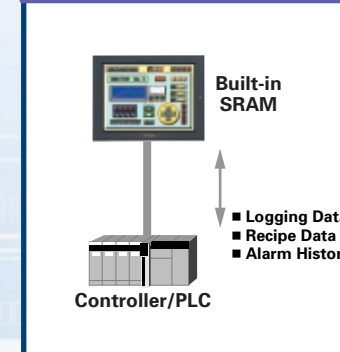
GP-Web enables remote monitoring of factory floor data anytime and anywhere without special programming.



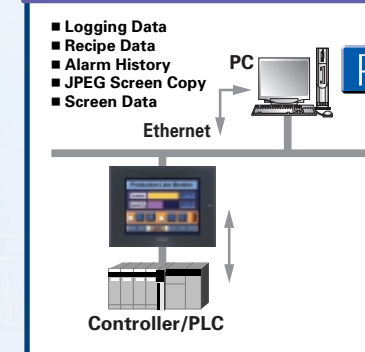
ETHERNET NETWORK

DATA HANDLING

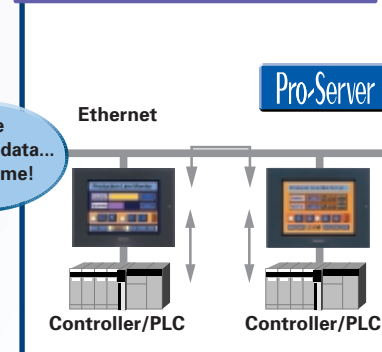
SRAM Data Storage



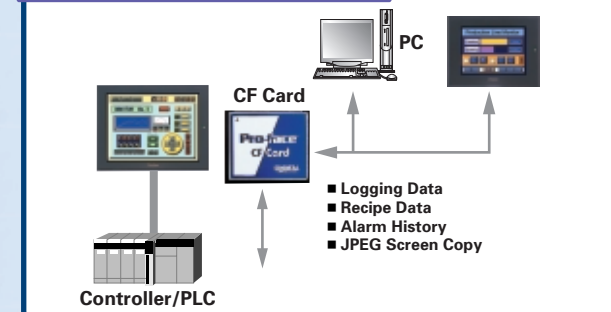
Network Data Collection



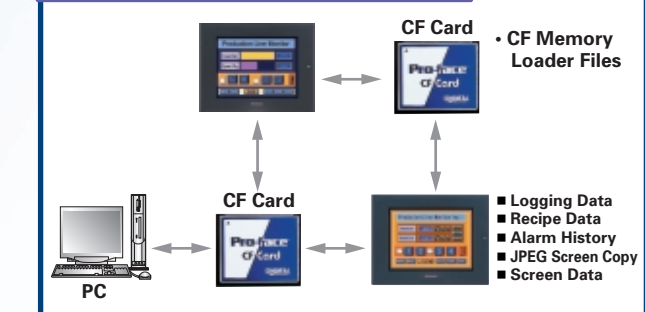
Peer-to-Peer Data Sharing



CF Card Data Handling



CF Card Data Maintenance



OMRON

Table listing OMRON SYSMAC CS1 and SYSMAC CJ series PLC models with columns for Series Name, CPU, Link, Direct, 1:n, Multi-Link, Device-Net, and Ethernet.

ORIMVEXTA

Table listing ORIMVEXTA E1 series PLC models with columns for Series Name, CPU, and Link.

Rockwell (Allen-Bradley)

Large table listing Rockwell PLC series including SLC500, PLC-5, Control Logix 5000, MicroLogix1000, MicroLogix1200, and CompactLogix, with columns for Series Name, CPU, Link, Direct, Multi-Link, Device-Net, DH+, DH485, Remote I/O, and Ethernet.

Schneider Electric

Table listing Schneider Electric Nano and Micro series PLC models with columns for Series Name, CPU, Modbus RTU, Modbus TCP, and Uni-Telway.

Schneider Electric

Table listing Schneider Electric Premium, Twido, and Quantum series PLC models with columns for Series Name, CPU, Modbus RTU, Modbus TCP, and Uni-Telway.

Sharp

Table listing Sharp New Satellite JW series PLC models with columns for Series Name, CPU, Link, and Multi-Link.

Shinko Electric

Table listing Shinko Electric SELMART series PLC models with columns for Series Name, CPU, and Link.

SIEMENS

Table listing Siemens SIMATIC S5, SIMATIC S7-200, SIMATIC S7-300, SIMATIC S7-400, and SIMATIC 505 series PLC models with columns for Series Name, CPU, Link, Direct, Profibus, MPI, INTERBUS, and Ethernet.

Toshiba

Table listing Toshiba PROSEC EX, PROSEC T, and FREQROL-B3 series PLC models with columns for Series Name, CPU, Link, Multi-Link, and Ethernet.

Toshiba

Table listing Toshiba PROSEC T, PROVISOIR B, and V Series series PLC models with columns for Series Name, CPU, Link, Multi-Link, and 1:n.

Toshiba Machine

Table listing Toshiba Machine PROVISOIR TC200 series PLC models with columns for Series Name, CPU, and Link.

Toyoda Machine Works

Table listing Toyoda Machine Works TOYOPUC-PC2 and TOYOPUC-PC3 series PLC models with columns for Series Name, CPU, Link, and 1:n.

Yaskawa Electric

Table listing Yaskawa Electric Memocon-SC, Control Pack, Memocon Micro, and MP900 series PLC models with columns for Series Name, CPU, Link, Direct, Multi-Link, Ethernet, and Device-Net.

Yokogawa

Table listing Yokogawa FACTORY ACE and STARDOM series PLC models with columns for Series Name, CPU, Link, Direct, 1:n, Multi-Link, n:m, Ethernet, and Device-Net.

Ubon

Table listing Ubon UPZ series PLC models with columns for Series Name, CPU, and Link.

Inverters

Table listing Fuji Electric FRENCIS5000G11S, FRENCIS5000P11S, FVR-E11S, and FVR-C11S series Inverters with columns for Series Name, Inverters, and 1:n.

Hitachi Industrial Equipment Systems

Table listing Hitachi Industrial Equipment Systems SJ300 and L300P series Inverters with columns for Series Name, Inverters, and 1:n.

Mitsubishi Electric

Table listing Mitsubishi Electric FREQROL-A500, FREQROL-E500, FREQROL-F500, FREQROL-F500L, FREQROL-S500, and FREQROL-B3 series Inverters with columns for Series Name, Inverters, and 1:n.

Toshiba Schneider Inverter

Table listing Toshiba Schneider Inverter VF-S9, VF-nC1, VF-S11, and VF-A7 series Inverters with columns for Series Name, Inverters, and 1:n.

Yaskawa Electric

Table listing Yaskawa Electric Varispeed G7, Varispeed F7, VS mini V7, and VS mini J7 series Inverters with columns for Series Name, Inverters, and 1:n.

Temperature Controllers

Chino

Table listing Chino LT and JU series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Fenwal Controls of Japan

Table listing Fenwal Controls of Japan AL Series series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Fuji Electric

Table listing Fuji Electric Micro Controller-X (PXR) series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

OMRON

Table listing OMRON E5_N Digital Temperature Controller series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

RKC Instrument

Table listing RKC Instrument CB Series and SR-Mini series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Toho Denshi

Table listing Toho Denshi REX-F, SR Mini HG, MA900, and HA900 series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

RKC Instrument

Table listing RKC Instrument HA400 and SA200 series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Shimaden

Table listing Shimaden SR253, SR80, and SR90 series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Shinko Technos

Table listing Shinko Technos C, FC, FIR, GC, FCL, PC-900, PCD-33A, JCR-33A, JCD-33A, JIR-301-M, and DCL-33A series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Toho Denshi

Table listing Toho Denshi TTM-004, TTM-X04, TTM-00B, TTM-10L, TTM-100B, TTM-110, TTM-110B, TTM-120, TTM-300, TTM-300B, and TTM-1020 series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Yamatake

Table listing Yamatake SDC and DMC series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Yokogawa M&C

Table listing Yokogawa M&C UT100, UT2000, UT3000, and GREEN SERIES series Temperature Controllers with columns for Series Name, Temperature Controllers, and 1:n.

Servos

Matsushita Electric

Table listing Matsushita Electric MINAS-A and MINAS-S series Servos with columns for Series Name, Servos, and 1:n.

Analyzer

JT Engineering

Table listing JT Engineering JE-70 series Analyzer with columns for Series Name, Analyzer, and 1:n.

Bar-Code Readers

2-D Code Reader (Connected to Expansion Serial Interface)

Table listing 2-D Code Readers including Tohken and Denso models with columns for Series Name and Type.

Bar Code Readers (Connected to Tool Connector)

Table listing Bar Code Readers including Aimex, OPTO Electronics, Tohken, NEC Infrontia, and Denso models with columns for Series Name and Type.

*1 Be sure to use the Y cable included with the unit and connect it correctly. If a non-"Y" cable is used, or if the bar-code reader is connected directly to the GP unit with a GP unit.

*2 The following settings must be entered prior to using the bar-code reader with a GP unit.

1) Set the CAPS.

2) Add the Carriage Return (CR) in the Postamble's settings. For the details about these settings, please refer to the Installation Guide included with the bar-code unit.

Bar-Code Readers (Connected to Expansion Serial Connector)

Table listing Bar-Code Readers including Aimex, OPTO Electronics, Symbol Technology, Keyence, and Denso models with columns for Series Name, Series Name, and Type.

Speakers

Table listing Arrow Electronics and Noboru Electric series Speakers with columns for Series Name, Series Name, and Connection Port.

*GP2600/2500/2400 Series only.

*The equipment in the above list is supported by "2000 series" or newer GP models. Some of this equipment is not supported by earlier GP models. There are also precautions and other information related to their connection. For details, please refer to the Device/PLC Connection Manual.

*New equipment is being added to this list regularly. Please consult your Pro-face sales representative for the latest information.

*n1(Multi-link) = multiple GPs : 1 PLC *1:n = 1 GP : multiple PLCs *n:m = multiple GPs : multiple PLCs *Some usage restrictions exist for Pro-Server. Please refer to the Pro-Server User's Manual for details.

EASY SCREEN CREATION & LOGIC PROGRAM DEVELOPMENT

Screen Editor and Logic Program Development Software

GP-PRO/PBIII C- Package

GPPRO-CNT01W-P**



High Visibility Menu Screen. Easy Programming for Beginners.

The Parts Palette and Editor Screen now appear in the same screen, so you can place parts quickly and easily by simply dragging them from the palette and dropping them on the screen. Positioning the cursor over a tag icon also brings up an explanation of that tag's operation, to help you create and edit screens.

Flexible screen design using tags

- Simultaneously display up to three windows. (Two U tag windows, three windows in total)
- Display the alarm history (Q tag).
- Easy, panel-touch operation setting (T tag).



Attractive Fonts

Windows font display

Windows fonts can be displayed as bitmap data on the GP screen just as you want them.

Integral-multiple fonts

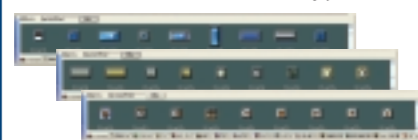
Now you can enlarge fonts in the usual scaling factors of 1, 2, 4 and 8, and in any magnification rate between 1 and 8. This lets you precisely adjust character size to match your layout.



Beautiful Graphics

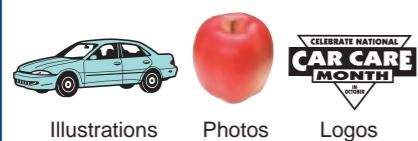
Select from 1,200 image parts

Create screens quickly and easily by simply arranging parts and marks selected from 1,200 available types.



Create and use your own BMP parts

Create your own parts or use parts created in the past.



Worldwide Compatibility

Touch panel language switching

By simply presetting a multiple language table on the touch panel, you can switch the text display with a single touch during operation. The import/export function for multiple language tables lets you easily input and translate CSV files.



EASY SCREEN CREATION

Time Scheduling

This function makes it easier to set up devices and handle routine tasks.

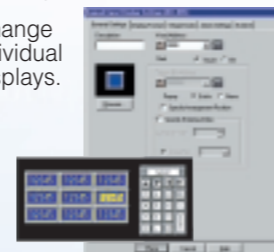
Bit On/Off and word setting can be scheduled by day of the week or for a specific time. The weekly and time setting can also be changed on the display device.



Improved Keypad Display Function

We expanded the setting parameter display function for more efficient on-screen input.

- Touch input for input mode activation.
- A sequence designation function for inputting multiple items (with the group function).
- Designation of the change notification bit for individual setting parameter displays.
- A more flexible arrangement for the popup keyboard.



Improved Editing

We made about 30 improvements to further enhance usability and convenience.

Upgrade Points C- Package03

Security Level Function

Restrict user access depending by operator level.

Use the 15-level password protection function to restrict access to specific screens, such as management and maintenance screens. This protection function helps to improve screen security, which also means greater safety for machines that are unattended or installed off-site.



Expanded Alarm Summary Display Function Using Q Tags

We expanded and improved the Q tag function for alarm display.

- Generation count, cumulative time and level information added.
- Alarm sorting function (by date, generation count, etc.).
- The number of blocks were increased from the previous 3 to 8.
- Different colors for different level messages.

Text Screen's Multi-language Function

The text screen now supports multiple languages. A and X tags can be used to display different languages.



Share General-Purpose Data for Editing

TXT Notepad, Wordpad	DXF AutoCAD* (Autodesk)	CSV Excel (Microsoft)	BMP/JPG Photoshop (Adobe)	RTF Word (Microsoft)	WAV Media Player (Microsoft)
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* Can be used for a Release 12 program.

GP-PRO/PBIII C- Package03 Software Environment Specifications

Product No.	PC	Screen Resolution	Hard Disk Space	Memory	Drive Type	OS	Network Protocol
GPPRO-CNT01W-P03	Windows® compatible PC with Intel PentiumIII 266MHz or faster.	SVGA (800 x 600 pixels) or higher	Minimum: 85 MB Recommended: 215 MB or more	Minimum: 32MB Recommended: 64MB or more	CD-ROM Drive	Windows® 95/98/2000/Me/XP Windows NT® (4.0 or later) (Windows NT® 4.0: Service Pack 3 or later)	TCP/IP (Set from the control panel)

REAL-TIME DATA COLLECTION

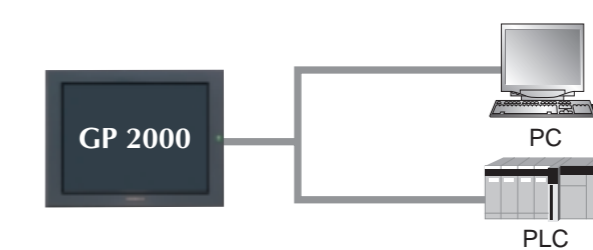
Data Collection Software

Pro-Server with Pro-Studio

PSW-ED01-V**



Data from the production sites can be collected by Pro-Server and sent to various PC applications in real-time. Automatic collection of production data makes great support for improving both productivity and quality.

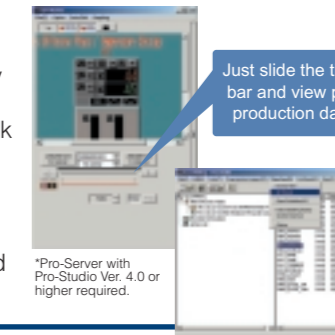


Pro-Server Add-on Software

GP-Viewer

PSW-GV01-V**

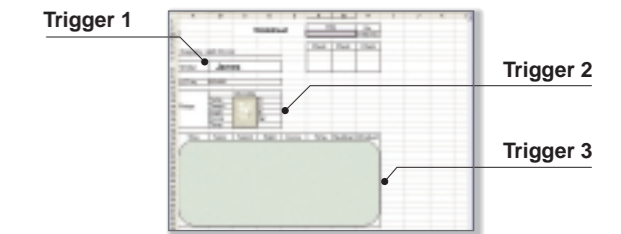
GP screen at the production site can be monitored directly on Pro-Server. Use the data playback feature to check previously recorded production data and visually trace the source of hard-to-find problems.



*Pro-Server with Pro-Studio Ver. 4.0 or higher required.

NEW EXCEL REPORT

Use multiple provider triggers to collect data on a single sheet



- Update data with the Excel window open.
- Paste not only device values but also text strings and JPEG images from logging, trend and other stored data.
- Use delivery triggers to switch or print worksheets and books.

DEVICE VIEWER

View past or present production data as easily as you would view a video.

Automatically records and collects production data, for immediate playback of either past or present line operating conditions.

Immediately send out orders from your office to the factory.

Alert control staff to important alarms.

Share Device/PLC Data - Regardless of the Manufacturer.

Remote Screen Image Capturing.

Re-use Collected Data in Other Software Applications. (Excel, SCADA, OPC, SQL, DDE, API)

REMOTE MONITORING

Web Operation Software

GP-Web

GW-CJ01-V**



The GP screen can be remotely monitored on a Web browser, saving both time and costs.

Access a wide variety of vital production data from remote locations.

Just connect GP-PRO/PBIII data — without special programming.

Monitor production conditions anytime, anywhere.

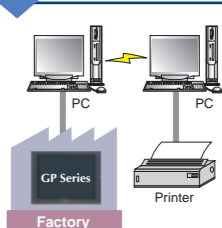
Check the conditions in real-time!

Using GP-Web, data from distant production sites can show actual conditions in real-time.



Create documents anywhere!

GP-Web can retrieve required data in CSV or JPEG format to analyze error histories or write up daily reports, anywhere, anytime.



Troubleshoot from a distance!

With complete grasp of the system status at your fingertips, you can save time going to the site for troubleshooting.



Accessories

NETWORK INTERFACE UNITS

The background color of each cell shows the connectivity of the unit to a GP in each of the GP Series system designs.

	DeviceNet		PROFIBUS	
Bus Conversion Unit for GP-2600/2500/2601/2501 Series PSL-CONV00 CE (U) (UL)	DeviceNet Slave Unit*1 CA1-DNSALL-21 CE	DeviceNet Slave Unit*2 GP070-DN41 CE (U) (UL)	PROFIBUS Slave Unit*1 CA1-PFSALL-21 CE	PROFIBUS Slave Unit*2 GP070-PF11
INTERBUS INTERBUS Slave Unit*2 GP070-IB41 CE (U) (UL)	T-Link T-Link I/F Unit*2 GP450-ZB21	Ethernet Ethernet I/F Unit*2 (10 Base-T) GP070-ET41 CE (U) (UL)	CANopen CANopen Slave Unit*1 CA1-COSALL-21 CE	MELSECNET MELSECNET/10 Unit*2 (Optical loop type) GP070-MNL11
MELSECNET MELSECNET/10 Unit*2 (Coaxial bus type) GP070-MNB11	CC-Link CC-Link I/F Unit*2 GP070-CL11 For the Remote Device Station GP077-CL11*3 For the Intelligent Device Station		Video-mix Unit for GP-2600T, 2500T GP2000-VM41 CE (U) (UL)	Multi Unit E*2 for GP-2601/2501 Series GP077-MLTE41 CE (U) (UL)
			Multi Unit S*2 for GP-2601/2501 Series GP077-MLTS11	

*1 To be sold at only Pro-face Europe B.V.. For further information, please contact Pro-face Europe B.V..

*2 When using a GP70/77R Series Expansion Unit with GP-2600/2500/2601/2501 Series Unit, the optional Bus Conversion Unit (PSL-CONV00) is required. These Unit are not support with GP-2400/2300/2401/2301 Series.

*3 Bus Conversion Unit (PSM-CONV00) is required. Be careful when installing, because this unit will protrude from the main body.

OPTIONAL ITEMS

Data Transfer Cable GPW-CB02	USB Data Transfer Cable GPW-CB03	RS-232C Cable (5m) GP410-IS00-O	RS-422 Cable (5m) GP230-IS11-O Multi-link Cable GP230-IS12-O	RS-422 Connector Terminal Block GP070-CN10-O	CPU I/F Cable for Mitsubishi PLC A, QnA Series GP430-IP10-O	CPU I/F Cable for Mitsubishi PLC FX Series GP2000-CBLFX/1M-01 GP2000-CBLFX/5M-01
RS-422 cable (5m) for the Two-port Adapter II GP070-MDCB11	Two-port Adapter II for Mitsubishi PLC A, QnA, FX Series GP070-MD11	GP2000 Printer Cable (2m) PSM-PRCB00	TTY Converter I/F Cable (5m) for SIEMENS S5 Series GP000-IS11-O	CF Card CA3-CFCALL/□□MB-01 □□: 64 (64MB)/128 (128MB) 256 (256MB)/512 (512MB)	CF Card Adapter GP077-CFAD10	CF Card Front Maintenance Unit GP077-CFFM10 (for GP-2600T/2500T)

Backlight*	Installation Gasket	Connector Cover	Screen Protection Sheet
PS600-BU00 (For GP-2600T, 2601T) GP577RT-BL00-MS (For GP-2500T, 2501T) PS500S-BU00 (For GP-2500S) PS501S-BU00 (For GP-2501S) PS400-BU00-MS (For GP-2400T, 2401T) PS300-BU00 (For GP-2300L, 2301S/L)	GP570-WP10-MS (For GP-2600T, 2500T/S/L, 2601T, 2501T/S) PS400-WP00-MS (For GP-2400T, 2401T) PS300-WP00 (For GP-2300 Series)	PS-BH00 Installation Fastener GP070-AT01 Screw Lock Terminal Block GPM-AXCN01 (For GP-2601T, 2501T/S/L, 2401T)	PSL-DF00 (For GP-2600T, 2500T/S/L, 2601T, 2501T/S) PS400-DF00 (For GP-2400T, 2401T) PS300-DF00 (For GP2300 Series)

* The GP-2500L/2501L/2300T/2301T's backlights cannot be replaced by the user. When the backlights need to be replaced, please contact your local GP distributor.

OPTIONAL ITEMS FOR HAND-HELD MODELS

RS-232C Open-end Cable (3m) GP2000H-C232-3M	RS-232C Cable with D-sub (3m) GP2000H-D232-3M	RS-232C Adapter GP2000H-AP232	RS-422 Open-end Cable (3m) GP2000H-C422-3M	RS-422 Cable with D-sub (3m) GP2000H-D422-3M	RS-422 Adapter GP2000H-AP422
RS-232C Open-end Cable (10m) GP2000H-C232-10M	RS-232C Cable with D-sub (10m) GP2000H-D232-10M		RS-422 Open-end Cable (10m) GP2000H-C422-10M	RS-422 Cable with D-sub (10m) GP2000H-D422-10M	

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CE / UL cUL / RU cRU

Caution: Before operating any of these products, please be sure to read all related manuals thoroughly.

- For printing purposes, the colors in this catalog may differ from those of the actual unit.
- Actual user screens may differ from the screens shown here.
- LCD screens may exhibit minute grid-points (light and dark) on the Display Panel surface. Also, "Contouring" - where some parts of the screen are brighter than others, producing a wavelike pattern - may occasionally occur. Both are normal for an LCD display and are not defects.
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