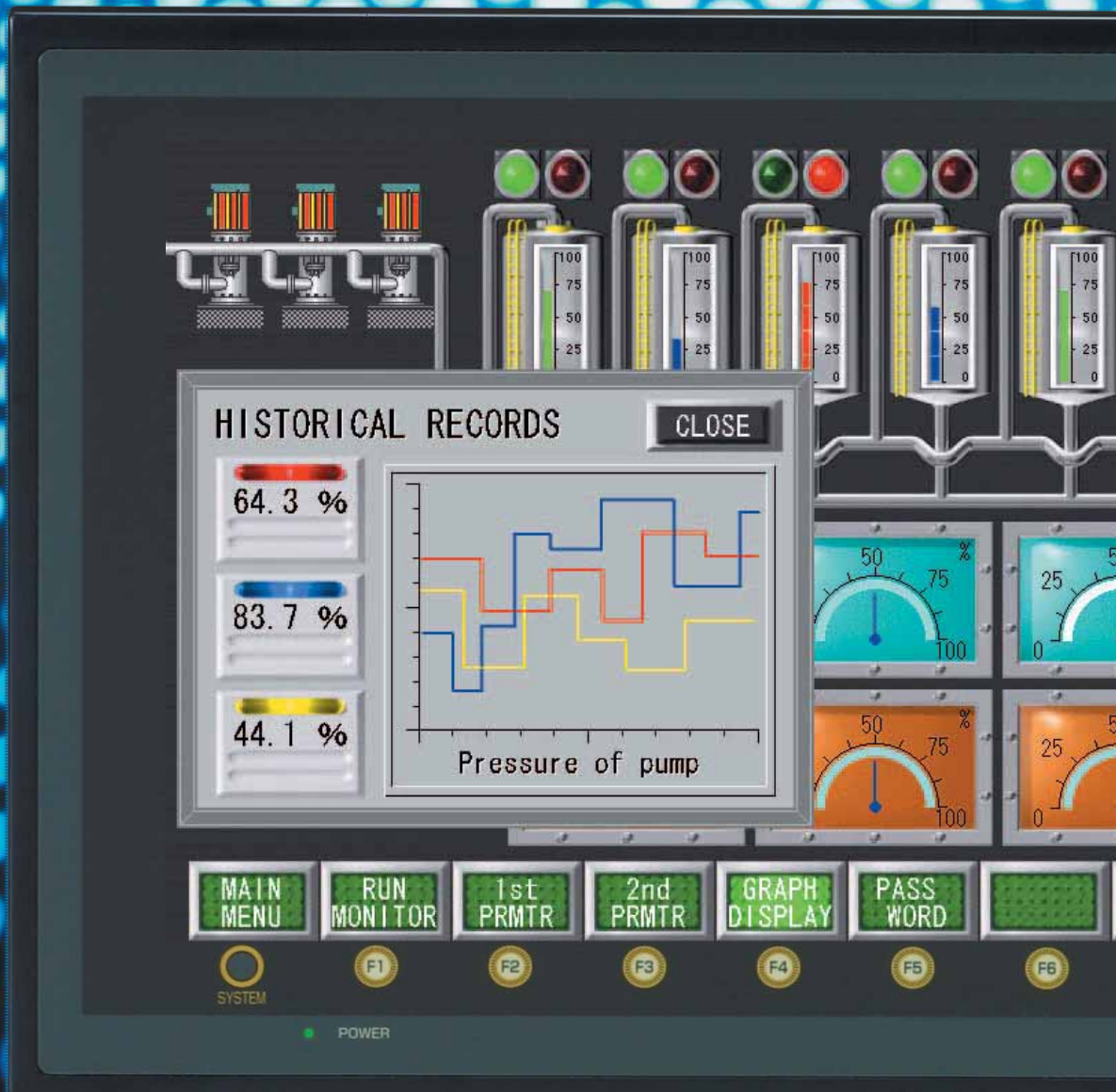# Panasonic
ideas for life

**Reborn with new features and support
for even large-scale production equipment!**

GV Series Selector Chart

Item	GV42C	GV52C	GV52S	GV62S
Product name	**GV42C**	**GV52C**	**GV52S**	**GV62S**
Screen size	7.7 inch	10.4 inch		12.1 inch
Display	STN color LCD	TFT color LCD		
Resolution (W × H dots)	640 × 480 (VGA)		800 × 600 (SVGA)	
Display color	128 colors		32,768 colors and 16 blink colors	
Backlighting	Cold cathode tube			
Replacement backlight	Possible			
Touch key	Analog type			
Touch key resolution (W × H)	1024 × 1024			
Function switch	8 pcs.			
True-type font display	Available			
Multi-language	English, European, Simplified Chinese, Korean and Japanese			
Compatible PLCs	Matsushita Electric Works, Mitsubishi, Omron, Siemens, Yokogawa, Toshiba Machine, A-B, Modicon and general-purpose RS232C			
Network	Ethernet (unit sold separately, used AIGV833)		Ethernet (10BASE-T comes standard)	
Clock functions	Internal			
Clock data backup	Lithium "coin" battery			
Memory expansion	Option (Memory expansion cassette)			
Printer interface	Centronics compliant, bar code printer available, half pitch 20 pins			
CE marking	Available (Compliant types available.)			
UL/cUL	Available (Compliant types available.)			
Screen creation tool	Terminal GVWIN for GV series			
Through function	—			
Macro function	Available			
Dimensions (W × H × D mm inch)	233.0 × 178.0 × 66.1 9.173 × 7.008 × 2.602	303.8 × 231.0 × 72.0 11.961 × 9.094 × 2.835		326.4 × 259.6 × 72.0 12.850 × 10.220 × 2.835
Panel cut dimensions (W × H mm inch)	220.5 × 165.5 ($^{+0.5}_{-0}$) 8.681 × 6.516 ($^{+.020}_{-0}$)	289.0 × 216.2 ($^{+0.5}_{-0}$) 11.378 × 8.512 ($^{+.020}_{-0}$)		313.0 × 246.2 ($^{+0.5}_{-0}$) 12.323 × 9.693 ($^{+.020}_{-0}$)
Body color	Black			
Operating voltage	24 V DC	100 to 240 V AC/24 V DC		

GV Series

The features you need, simple and easy to use.

Supports even large-scale production equipment.

Easy to use!

GV42C
CE/UL/cUL

| 7.7 inch | STN color | 128 colors display | 600× 480 dots |

GV52C
CE/UL/cUL

| 10.4 inch | TFT color | 128 colors display | 600× 480 dots |

GV52S
CE/UL/cUL

| 10.4 inch | TFT color | 32,768 colors display | 800× 600 dots |

GV62S
CE/UL/cUL

| 12.1 inch | TFT color | 32,768 colors display | 800× 600 dots |

Large Programmable Display GV Series

32,768 color, clear, bright display (GV52S and GV62S only)

Being able to display 32,768 colors, all sorts of clear and bright displays are possible. The high resolution display of JPEG and bitmap files is possible as well as the realistic display of parts, or even photographs and illustrations loaded from a digital camera or scanner.

● 128 colors

● 32,768 colors
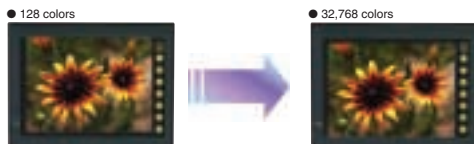
JPEG file display (GV52S and GV62S only)

Previously saved JPEG files can be loaded into a PC and used for document creation. Also, still images clipped from a video camera can be re-displayed.
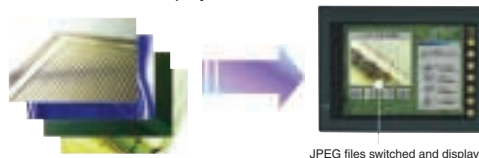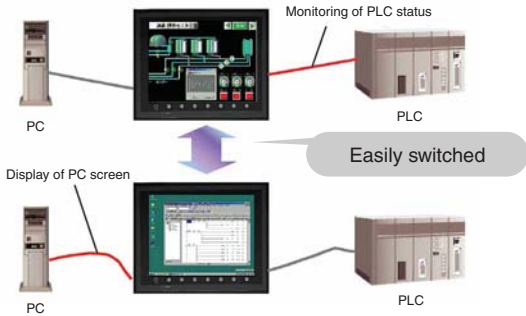
JPEG files switched and displayed

## Analog RGB I/O (option, GV52S and GV62S only)

■ Analog RGB input

By connecting to a PC, the PC screen can be displayed and the switching of screens is easy.

Monitoring of PLC status

PC

PLC

Easily switched

Display of PC screen

PC

PLC

*An optional unit (AIGV881) is required for analog RGB input.

■ Analog RGB output

GV series screens can be displayed on PC monitors or output to a projector for display on a screen.

Large screen monitor
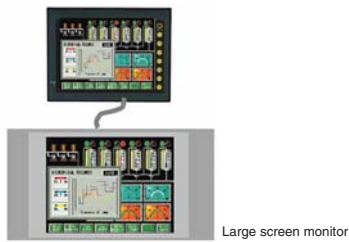
*An optional unit (AIGV882) is required for analog RGB output.

Sans serif font display

The fonts can be displayed for smooth and beautiful text display. HA Gothic True-type font can be used.
*When using HA Gothic, you cannot use it together with 16 or 32 dot fonts. Use of the expansion memory cassette (AIGV824) may be necessary depending on amount of remaining memory.

Brightness adjustment (GV52C, GV52S and GV62S only)

With detailed brightness control possible in 128 steps, the display will always be clear and easy to see. Installation is possible in dark areas inside factories or where ambient light fluctuates. (Backlight life will be shortened slightly.)

Video display function (option, GV52S and GV62S only)

Operation while viewing a superimposed video is possible. Video also facilitates troubleshooting by being able to load single frame stills using the signal snap function or 16 continuous still frames using the strobe snap function.
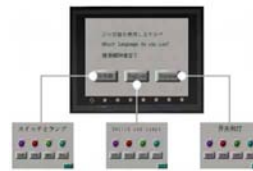*An optional unit (AIGV880) is required to use this function.

● Superimposition

Even with the video screen at full size (640 × 480 dots), the operation screen can be displayed simultaneously on top of it.

Multi-language display

Eight languages, including Japanese, can be input in addition to English. These can be displayed simultaneously or switched with a single touch.

Multi-lingual editing

Inputting text is easy because English can be displayed at the same time as other languages.

*A CF card is required to enable multi-lingual switching.

Animation function (GV52S and GV62S only)

High-resolution animations can be easily created by combining bitmap pictures or pictures drawn by editing dots. Coordinate settings can be easily specified on the screen using a mouse.

● Animation display
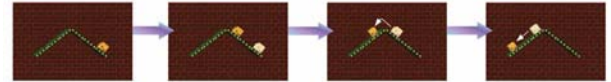
Sound playback function

WAV format sound files can be played back by simply connecting a speaker.
Be at ease knowing that errors and other abnormalities will be heard at a distance.
*Optional units (AICV880 to AIGV883) are required to use this function.

Power Supply Error!!

An error has occurred!

Power supply problem!

Screen Creation Tool for The GV Series Terminal GVWIN

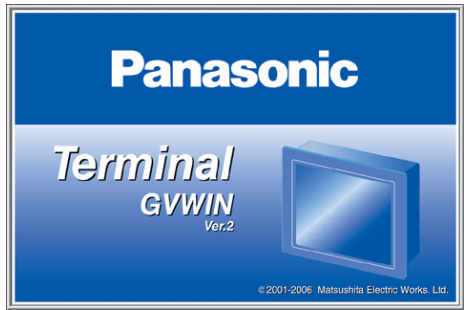Our total support philosophy allows you to utilize existing data assets, develop screen data quickly, debug easily, and even facilitates production of your user documentation!

Terminal GVWIN
Screen creation tool for the GV Series

WIN 95   WIN 98   WIN NT   WIN 2000   WIN XP   Space capacity Min. 15MB

Just paste the parts; it couldn't be simpler!

To build screens select parts such as switches and lamps from our extensive parts files and place them on the screen.
Of course, you can also create your own original parts as well.
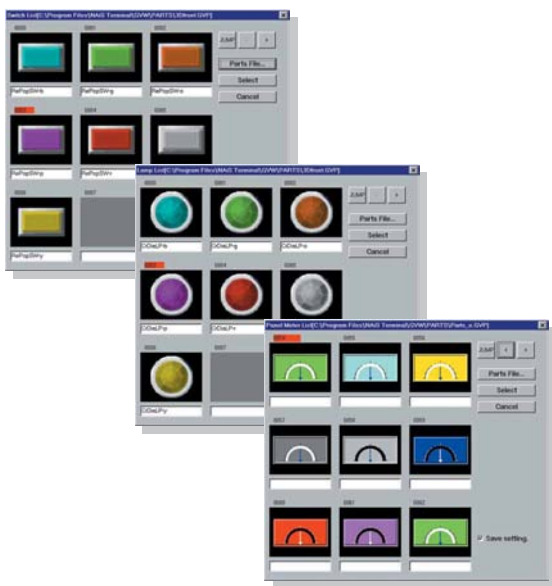
Easy copying of file screens

The Screen Manager makes it very easy to copy of file screens. This makes it easy to use past assets or split up screen creation tasks.
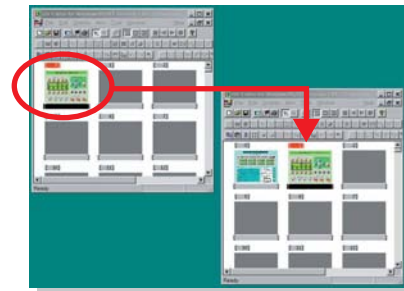
Simulator function

Even without a PLC you can still confirm operation of the GV by connecting it to a personal computer. All you need is a screen data transfer cable.
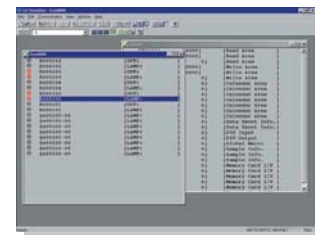
Registering original parts for future use

You can save time by combine parts and graphics and registering them as custom parts to reuse them in the future.
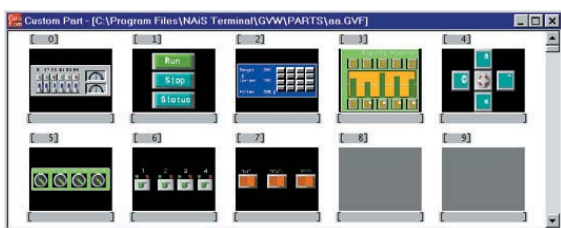
Screen bitmap copy

Screens can be output as bitmaps and for use by other applications. This is convenient when creating instruction manuals for your equipment.

GV Series Specifications

General specifications

Item		Specifications			
	GV42C	GV52C/GV52S		GV62S	
	AIGV4020012	AIGV5320000/AIGV5430000	AIGV5320012/AIGV5430012	AIGV6430000	AIGV6430012
Rated voltage	24 V DC	100 to 240 V AC	24 V DC	100 to 240 V AC	24 V DC
Power consumption	15 W max.	60 VA max.	30 W max.	60 VA max.	30 W max.
Permissible momentary power failure	1 ms or less	20 ms or less	1 ms or less	20 ms or less	1 ms or less
Breakdown voltage	Between external DC power terminal and frame ground: 500 V AC for 1 min.	Between external AC power terminal and frame ground: 1500 V AC for 1 min.	Between external DC power terminal and frame ground: 500 V AC for 1 min.	Between external AC power terminal and frame ground: 1500 V AC for 1 min.	Between external DC power terminal and frame ground: 500 V AC for 1 min.
Insulation resistance	500V DC, 10MΩ or more				
Ambient temperature	0 to +50°C/32 to 122°F				
Ambient humidity	85%RH or less (without dew condensation)				
Storage temperature	−10 to +60°C/−50 to 140°F				
Vibration resistance	Vibration frequency 10 to 150 Hz, Acceleration: 9.8 m/s² (1G); Single amplitude: 0.075 mm, 3 directions of X, Y, and Z: 1 hour.				
Shock resistance	Pulse shape: sine half wave, peak acceleration: 147 m/s² (15G), 3 directions of X, Y and Z: six times				
Noise immunity	1500 Vp-p (1 µs pulse width, 1 ns rise time) noise simulator used. The DC type satisfies EMC standards separately.				
Static electricity discharge resistance	IEC1000-4-2 compliant, contact 6 kV, in air 8 kV				
Grounding	D-class earth (Class 3 earth)				
Protective construction	Front panel: IP65; Rear case: IP20 compliant; Shape: single unit; Installation method: panel imbedded				
Cooling system	Cooling naturally				
Mass	Approx. 1.5 kg/3.31 lb	Approx. 2.4 kg/5.29 lb		Approx. 2.7 kg/5.95 lb	

Display

Item		Specifications					
	GV42C	GV52C		GV52S		GV62S	
	AIGV4020012	AIGV5320000	AIGV5320012	AIGV5430000	AIGV5430012	AIGV6430000	AIGV6430012
Display	STN color	TFT color					
Display color	128 colors			32,768 colors and 16 blink colors			
Resolution	640 × 480 (VGA)			800 × 600 (SVGA)			
Effective display area	7.7 inch	10.4 inch				12.1 inch	
Backlight	Cold cathode tube (user replaceable)						
Backlight average life	Approx. 40,000 hours	Approx. 50,000 hours					
Auto off function	Continually lit, free setting						
Contrast adjustment	Set via function switch	Not available					

*Adjusted using function switch.

Functions

Item		Specifications				
Display languages		Japanese	English, European	Traditional Chinese	Simplified Chinese	Korean
Display characters	1/4 size, 1/2 size	ANK code	Latin1	ASC II code	ASC II code	ASC II code
	Full size 16 dots	JIS#1 and #2 TrueType font	—	Traditional Chinese	Simplified Chinese	Hamkul alphabet (kanji character is improper)
	Full size 32 dots	JIS#1 TrueType font	—	—	—	—
Type of lines		6 types (fine, thick, dot, chain, broken, 2-dot chain)				
Tile patterns		16 types (incl. user-definable 8 types)				
Diplay property		Always on, blinking, reverse video, reverse video blinking				
Display color		32,768 colors and 16 blink colors (GV42C: 128 colors and 16 blink color)				
Color specification		Foreground, background boundaries (line)				
Screen creation		Special purpose software application: Terminal GVWIN (Windows version)				

Touch key

Item	Specifications
Form	Analog resistance film form
Mechanical lines	10⁶ cycles or more
Screen treatment process	Hard coat, non glare treatment 5%

Function swich

Item	Specifications
Number of switches	8
Form	Pressure sensitive switches
Mechanical life	10⁶ cycles or more

GV Series Types

Main units

Product name	Specification	Product No.
GV42C	7.7 inch STN/DC/CE/UL compliant product	AIGV4020012
GV52C	10.4 inch TFT/SVGA/AC/CE/UL compliant product	AIGV5320000
	10.4 inch TFT/SVGA/DC/CE/UL compliant product	AIGV5320012
GV52S	10.4 inch TFT/SVGA/AC/CE/UL compliant product	AIGV5430000
	10.4 inch TFT/SVGA/DC/CE/UL compliant product	AIGV5430012
GV62S	12.1 inch TFT/AC/CE/UL compliant product	AIGV6430000
	12.1 inch TFT/DC/CE/UL compliant product	AIGV6430012

Screen creation tool

Product name	Specification	Product No.
Terminal GVWIN	Screen creation tool software CD-ROM English version (with paper manual)	AIGV801
	Screen creation tool software CD-ROM English version (without paper manual)	AIGV8010

Interface unit

Product name	Specification	Product No.
Terminal converter	RS422/485 converter for connecting to PLC	AIGV830
Dual port interface	Mitsubishi CPU dual port interface	AIGV831
Communication unit	CC-Link communication unit	AIGV832
	Ethernet communication unit	AIGV833
	Profibus communication unit	AIGV834

Installable units

Product name	Specification	Product No.
Video input and sound output unit	Video input: 4 channels; sound output: 1 channel	AIGV880
RGB input and sound output unit	RGB input: 1 channel; sound output: 1 channel	AIGV881
RGB output and sound output unit	RGB output: 1 channel; sound output: 1 channel	AIGV882
Sound output unit	Sound output: 1 channel	AIGV883

Card recorder

Product name	Specification	Product No.
Card recorder	—	AIGV850

Memory

Product name	Specification	Product No.
Expansion F-ROM	8 MB	AIGV824
Expansion SRAM	512 KB	AIGV825

Screen protection sheets

Product name	Specification	Product No.
Screen protection sheet for the GV62S	12.1 inch. Screen protection sheet (non-glare type), 5 pcs.	AIGV6833
Screen protection sheet for the GV52C/GV52S	10.4 inch. Screen protection sheet (non-glare type), 5 pcs.	AIGV5834
Screen protection sheet for the GV42C	7.7 inch. Screen protection sheet (non-glare type), 5 pcs.	AIGV4835

Cable

Product name	Specification	Product No.
Printer cable	2.5 mm/8.202 ft	AIGV890
Screen transfer cable	3 mm/9.843 ft	AIGV8103
PLC connecting cable	For connection to tool port of Matsushita Electric Works FP0, FPΣ, FP2, FP2SH or FP-M	AFC8513
	For connection to COM. port of Matsushita Electric Works FP1, FP2, FP2SH, FP-M or FP10SH For connection to CCU of Matsushita Electric Works FP2 or FP3	AFB85813

Replacement battery
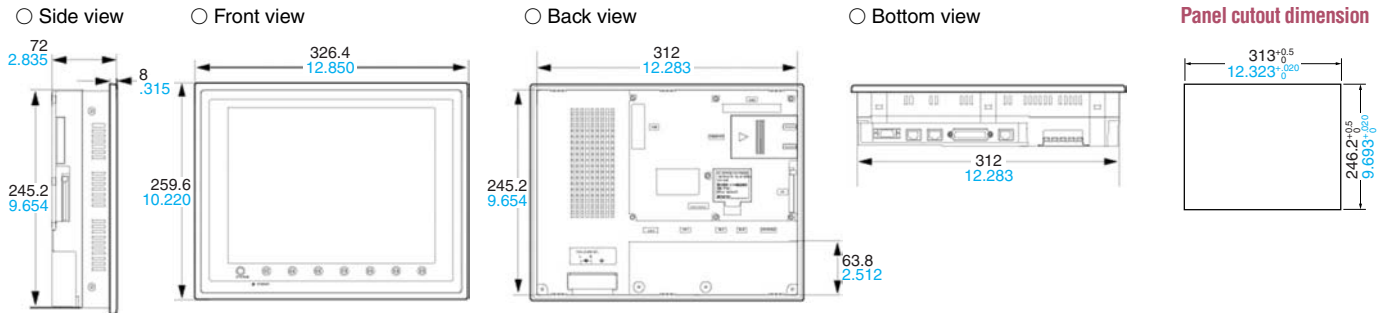
Product name	Specification	Product No.
Replacement battery	—	AIGV841

Replacement Backlight

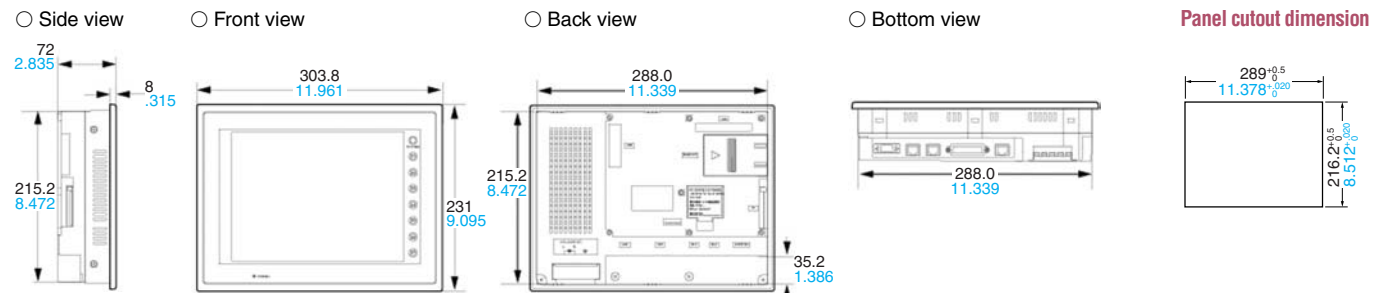| Product name	Specification	Product No.
Backlight for GV62S	Backlight for GV62S (12 inch TFT/SVGA)	AIGV6804
Backlight for GV42C	Backlight for GV42C (7 inch STN/VGA)	AIGV4800
Backlight for GV60T	Backlight for GV60T (12 inch TFT/SVGA)	AIGV6804
Backlight for GV50T/GV52C	Backlight for GV50T/GV52C (10 inch TFT/VGA)	AIGV5805
Backlight for GV50C	Backlight for GV50C (10 inch STN/SVGA)	AIGV5800
Backlight for GV40C	Backlight for GV40C (7 inch STN/SVGA)	AIGV4800

Notes: For GV60T and GV50T, use the following backlights when the hardware version is B or lower.
  Backlight for GV60T: AIGV6801
  Backlight for GV50T: AIGV5802
  For GV50S use the following backlights when the hardware version is a or lower.
  Backlight for GV50S: AIGV5801
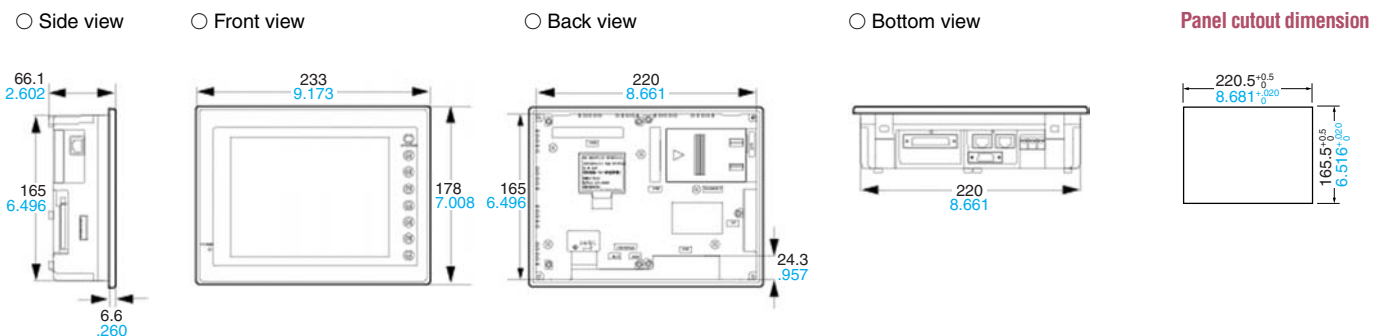
GV Series Dimensions

GV62S dimensions (Unit: mm/inch)

○ Side view ○ Front view ○ Back view ○ Bottom view **Panel cutout dimension**

GV52S/GV52C dimensions (Unit: mm/inch)

○ Side view ○ Front view ○ Back view ○ Bottom view **Panel cutout dimension**

GV42C dimensions (Unit: mm/inch)

○ Side view ○ Front view ○ Back view ○ Bottom view **Panel cutout dimension**

GV Series System Configuration

Screen creation tool software
Terminal GVWIN
AIGV801
AIGV8010

Screen transfer cable
AIGV8103

Personal computer

Printer (commercially available product)

Printer cable
AIGV890

Printer interface

Printer (commercially available product)

PLC connecting cable
AFC8513

Serial interface

D-sub 25-pin connector

For connection to tool port of Matsushita Electric Works
FP0, FPΣ, FP2, FP2SH or FP-M

For connection to COM. port of Matsushita Electric Works
FP1, FP2, FP2SH, FP-M or FP10SH
For connection to CCU of Matsushita Electric Works
FP2 or FP3

PLC connecting cable
AFB85813

Panasonic ®

ARCT1B214E-2   200810   Specifications are subject to change without notice.