

HG1B Operator Interface

HG1B - Cost effective graphical interface solutions

HG1B is a 4" size, monochrome LCD touchscreen suitable for small applications. Its compact size provides an advantage to save space and money. It has a fast response time (300 msec) which makes it easy for the user to view data quickly. The built-in library of images and graphics helps create a simple graphical interface. Moreover with expandable communications, it can communicate with IDEC PLCs and many major PLC manufacturers.



- 2 Models available: RS-232 / RS-485 and RS-422
- 127 KB memory, configure up to 100 screens
- Program up to 32 alarm points with an internal buzzer
- Built-in graphic capabilities
- Screen password protection
- Communication drivers for most major PLC manufacturers
- CE marked, UL/c-UL Listed, IP65
- Programmable with WindO/I-NV2 software



Part Numbers: Operator Interface

Description	Communication Type	Part Numbers
4" Monochrome LCD Screen, 24VDC Power Required	RS-232 / RS-485	HG1B-SB22WF
4" Monochrome LCD Screen, 24VDC Power Required	RS-422	HG1B-SB22JF

Part Numbers: Software

Description	Software Name	Part Number
Programming software for all Touchscreens (PLC Drivers are included with the software: IDEC, Allen Bradley-DF1, Omron, Mitsubishi, Modicon, Aromat, Siemens, Koyo (Automation Direct), Keyence, Toshiba, and many more)	WindO/I-NV2	HG9Y-ZSS2W

Part Numbers: Programming Cable

Description	Part Numbers
Programming cable for HG1B Series (PC to HG1B)	HG9Z-XCM1A or FC2A-KC4C

Part Numbers: Cables (to connect between HG1B & PLC)

Manufacturer	Model	Communication Type	Part Numbers
Allen Bradley	SLC 503/504	RS-232	HG9Z-XC100
	Micrologix series	RS-232	HG9Z-XC500
Aromat	FPO	RS-232	HG9Z-XC300
IDEC	FA series	RS-232	HG9Z-XC12A
	Micro 3	RS-232	HG9Z-XC11A Plus FC2A-KC2 (Both Required)
	Micro 3	RS-485	HG9Z-XC19A
	Micro 3C	RS-232	HG9Z-XC183
	MicroSmart (port 2 w/ FC4A-PC1)	RS-232	HG9Z-XC183
	MicroSmart (port 1 or port 2 w/ FC4A-PC1)	RS-232	FC4A-KC1CA
	OpenNet	RS-232	HG9Z-XC183
Automation Direct (Koyo)	DL240	RS-232	HG9Z-XC400
Mitsubishi	FX2N	RS-422	HG9Z-XC305

Part Numbers: Accessories

Description	Part Numbers
Mounting brackets for HG1B series (1 per pack)	HG9Z-XK

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Operator Interfaces

HG1B Specifications

General Specifications	Standards	Safety Standards	UL508, CSA C22-2, No. 142, IEC/EN61131, CE
		EMC Standards	EN50081-2, IEC/EN 61131-2
	Electrical	Rated voltage	24V DC ripple factor: 10% maximum
		Voltage variation range	85 to 120% of rated voltage
		Power consumption	10W maximum
		Instantaneous stopping time	10ms maximum
		Inrush current	10A maximum
		Dielectric strength	1500V AC, 10 ms, 1 hour (between power or I/O terminal and ground)
		Insulation resistance	In 500V DC megger at least 50MΩ (between power or I/O terminal and ground)
	Environmental	Operating temperature range	0 to 55°C (operation) 0 to 50°C (display contrast)
		Operating humidity range	10 to 90% relative humidity (avoid condensation)
		Storage temperature	-20 to +70°C
		Storage humidity	5 to 90% relative humidity (avoid condensation)
		Vibration resistance	10 to 55Hz, 10 m/s ² (2 hours each in the X, Y, and Z axes)
		Shock resistance	98 m/s ² (5 times each in the X, Y, and Z axes)
		Noise resistance	IEC1000-4-4 compliant Between power terminal and ground: 1k V p-p, 1μs, 1ns (with noise simulator)
		Static electricity resistance	6kV (using a static electricity simulator) IEC61000-4-2 compliant
		Operating atmosphere	No corrosive gases
	Structural	Installation	Panel mount
		Protection rating	IP65
Exterior dimensions (W x H x D)		146mm x 75mm x 70mm	
Panel Cutout Dimensions (W x H)		138mm +0.5 x 66mm -0.5	
Weight		450g approximate	

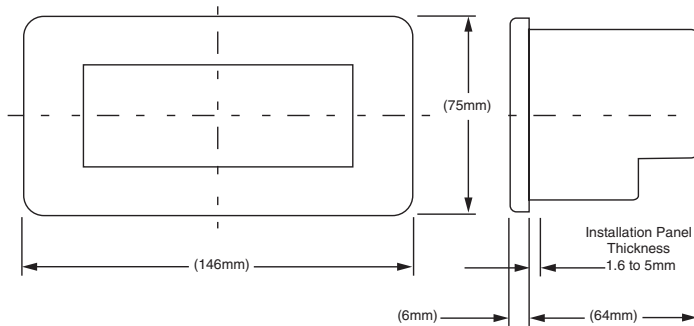
Operating Specifications	On-Screen Switches	Operating method	Resistive touch overlay
		Touch points	12 x 4 = 48
		Operating pressure	100g or less
		Life	1,000,000 operations minimum

Display Specifications

Display Specifications	Device	Display elements	STN blue mode LCD
		Backlight	Blue, or white
		Effective display	3.7" x 1.2" (95 x 31mm)
		Number of pixels	192 x 64
		Pitch	0.5 x 0.5mm
		Pixel size	0.47 x 0.47mm
		Element life	At least 50,000 hours
		Backlight life	At least 20,000 hours
	Character Display	Size	1/4 size: 8 x 8 dots, 1/2 size: 8 x 16 dots, Full size: 16 x 16 pixel
		Number	1/4 size: 24 x 8 lines, 1/2 size: 24 x 4 lines, Full size: 12 x 4 lines
		Types	1/4 size: JIS 8-bit code, IBM code page 437, 1/2 size: IDEC font, Full size: JIS No. 1 standard characters. IDEC font
		Attributes	Vertical/horizontal magnification: 1, 2, 3, and 4 times (except 1/4 size), blinking
Graphic Display	Graphic elements	Lines, rectangles, circles, arcs, elliptical segments, ellipses, regular polygons (3 to 8 sided), and bitmap images.	
	Lines	Solid, thick, and dotted (straight lines only)	
	Attributes	None	
Display Software Specifications	Display Pages	Up to 100 text/graphic pages	
	Numeric Data Entry	Pop-up numeric keypad	
	Touch Points	Up to 48 touch points per page	
	Touch Functions	Toggle digital points on/off, values up/down, change presets, change pages, and acknowledge alarms	
	Operator Feedback	Visual/audible feedback of touch input	
	Text	User-definable as static or dynamic	
	PLC Support	Communication drivers support most PLCs (see page K-16 for details)	
	Alarm Confirmation	Internal buzzer	

Dimensions & Panel Cutout

Front and Side View Dimensions



Installation Panel Cutout

