PLCs

Operator Interfaces

Automation Software

Power Supplies

Character Displays

HG1X text display for small applications

The HG1X series are text message displays with built-in user definable function keys which make them an excellent tool for small applications. The bright, back lit LCD screens can display data, alarms, errors, and data entry. The user can define as many screens as allowed by the memory and create multiple alarms with basic acknowledgements. In addition, they can communicate with IDEC PLCs as well as many other major brand PLCs.

- Models available:
 - 2-line, 16 character display with 24KB memory
 - 4-line, 20 character display with 24KB memory
 - 8-line, 20 character display with 64KB memory
- All keys are programmable to do multiple tasks
- Screen Password protection
- LEDs are programmable for on/off state
- Serial port for printing screens and alarms
- Numeric keypad for easy data entry (4 and 8-line displays only)
- Bitmap import capability (8-line displays only)
- Communication available for most major PLC manufacturers
- Class 1 Div 2 (UL 1604) for hazardous locations, UL508, IP65 rated
- All models are programmable with WINDMSG software

Screens:

Users can easily define as many screens as allowed by the unit's memory. A list of tasks can be assigned for each screen. All screens can be password protected providing an increased level of security. Various types of objects can be placed on the screens such as text, data display, alarm object, data entry, bar graphs, and a user can even import images (8 line display model only).

Keys:

The keys are user definable. Each key can have multiple tasks assigned to it, making them extremely powerful tools for simple machine control. Create simple alarms with keys assigned to acknowledge alarms and print or view next/previous alarms.

LED:

The LEDs provide on/off status for users to provide for simple monitoring.

Changing Data:

Cursor control (for 2-line display) or keypad (for 4-line and 8-line display) operations are available for easy data entry.

Serial Port:

Supports serial printing to print screens. Great for keeping records or for documentation purposes.



2 Line Display



4 Line Display



8 Line Display



Operator Interface

Description	Communication Type	Part Numbers
2-Line Text Message Display, No External Power Required	RS-232	HG1X-252
2-Line Text Message Display, 24VDC Power Required	RS-232 / RS-485	HG1X-222
4-Line Text Message Display, No External Power Required	RS-232	HG1X-452
4-Line Text Message Display, 24VDC Power Required	RS-232 / RS-485	HG1X-422
8-Line Text Message Display, 24VDC Power Required	RS-232 / RS-485	HG1X-822

All HG1X models come with mounting clips and a gasket.

Replacement Parts

Description	Model	Part Numbers
Hardware Cati 2 pieces mounting aline 9.1 generation	for HG1X-252/222	HG9Z-MTHW160D
Hardware Set: 2 pieces mounting clips & 1 gasket	for HG1X-452/422/822	HG9Z-MTHW170D

Sensors

www.idec.com

IDEC

WindMSG

Programming Software

HG1X Software

User-friendly WINDMSG software programs all HG1X text message displays. It has drop down menus and icons for convenient function selection. Objects are easily configured using step by step navigation. PLC drivers are built into the software, which allows for extended communication with IDEC and many other popular PLC manufacturers.



Software

Description	Software Name	Part Number
Programming software for all HG1X Series*	WINDMSG	WINDMSG



Includes communication drivers for other major PLC brands: IDEC, AB-DFI, Mitsubishi, Aromat, Siemens, Koyo, Modicon, Keyence, and many more.

Programming Cable

Description	Part Number	
Programming cable for HG1X Series (PC TO HG1X)	HG9Z-PC125A	

Cables - Connect between HG1X-252/452 to PLC

Manufacturer	Model	Communication Type	Part Numbers
ALLEN BRADLEY	Micrologix Series	RS-232	HG9Z-SCI007
AROMAT (Panasonic)	FP0/FPM	RS-232	HG9Z-SCI015
IDEC	Micro 3	RS-232	HG9Z-SCI25A (built-in converter)
	Micro 3C	RS-232	HG9Z-SCI25B
	MicroSmart family	RS-232	HG9Z-SCI25B
	OpenNet	RS-232	HG9Z-SCI25B
Automation Direct (KOYO)	DL 205 Series	RS-232	HG9Z-SCI023
MITSUBISHI	FX0	RS-232	HG9Z-SCI008 (built-in converter)
SIEMENS	S7-200	RS-232	HG9Z-SCI029

Cables - Connect between HG1X-222/422/822 and PLC

Manufacturer	Model	Communication Type	Part Numbers
	Micrologix series	RS-232	HG9Z-SCI100
ALLEN BRADLEY	SLC 500 series	RS-232	HG9Z-SCI120
AROMAT (Panasonic)	FP0/FPM	RS-232	HG9Z-SCI500
	Micro 3	RS-485	HG9Z-SCI220
IDEC	Micro 3C	RS-232	HG9Z-SCI200
IDEC	MicroSmart family	RS-232	HG9Z-SCI200
	OpenNet	RS-232	HG9Z-SCI200
Automation Direct (KOYO)	DL 205 Series	RS-232	HG9Z-SCI400
MITSUBISHI	FX0	RS-232	HG9Z-SCI600
SIEMENS	S7-200	RS-485	HG9Z-SCI300

AB-DF1*: HG1X-252/452 support Micrologix only, HG1X-222/422/822 support Micrologix and SLC 500 series PLCs

HG1X Specifications

General Specifications

			HG1X-252/HG1X-452	HG1X-222/HG1X-422/HG1X-822	
PLCs		Safety standards	UL508, UL1604	UL508, UL1604	
<u>.</u>	Standards	EMC standards	Immunity to ESD: Level 3 as per IEC 61000-4-2 Transient Immunity: Level 3 as per IEC 61000-4-4 Radianted Immunity: Level 3 as per IEC 61000-4-3 Emissions: EN55011 CISPR A Conducted RF Susceptibility: as per IEC 61000-4-6		
	Rated voltage		5V DC	24 VDC	
		Voltage variation range	5 VDC (+/-) 5%	24 VDC (+/-) 10%	
Operator Interfaces	Electrical	Power consumption	HG1X-252: 120mA maximum HG1X-452: 160mA maximum	HG1X-222: 1W typical; 3W maximum HG1X-422: 1.5W; 3W maximum HG1X-822: 2.5W; 3W maximum	
		Inrush current	N/A	HG1X-222: 45mA @24 VDC HG1X-422: 55mA @24 VDC HG1X-822: 115ma @24 VDC	
		Operating temperature range	0 to 55°C		
		Operating humidity range	0 to 90% RH (non-condensing)	10 to 90% RH (non-condensing)	
		Degree of Protection	IP65		
are		Storage temperature	−25 to +80°C		
oftw	Environmental	Storage humidity	90% RH	95% RH	
Automation Software	Vibration resistance	Vibration resistance	10 to 61.2Hz, @ 0.2mm displacement 61.2Hz to 150Hz @ 1.5G acceleration (on all axes)		
\utoma		Shock resistance		ation for 11ms, per axis (on all axes)	
4		Installation	Panel mount		
Power Supplies	Exterior dimensions (W x H x D in mm) Structural Panel cutout dimensions in m Weight		HG1X-252: 108 x 61 x 27 HG1X-452: 183 x 101 x 37	HG1X-222: 108 x 61 x 27 HG1X-422: 183 x 101 x 37 HG1X-822: 183 x 101 x 37	
		Panel cutout dimensions in mm	HG1X-252: 92 x 45 HG1X-452: 161 x 79	HG1X-222: 92 x 45 HG1X-422: 161 x 79 HG1X-822: 162 x 79	
		Weight	HG1X-252: 137g HG1X-452: 318g	HG1X-222: 150g HG1X-422: 340g HG1X-822: 366g	

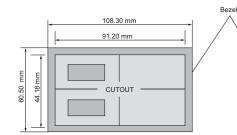
Gasket (For IP65 Sealing)

\Panel

27.10 mm

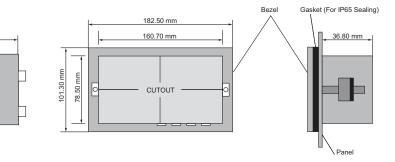
Dimensions and Panel Cutout

HG1X-252/HG1X-222 Dimensions/Panel Cutout





HG1X-452/HG1X-422/HG1X-822 Dimensions/Panel Cutout



90

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

IDEC:

 HG9Z-AC102
 HG9Z-2A1
 HG9Z-2A2
 HG9Z-2B1
 HG9Z-2C11A
 HG9Z-2C125A
 HG9Z-2C135A
 HG9Z-XR2
 HG9Z-2R2

 2D5PN05
 HG9Z-3D8PN02
 HG9Z-4DCPN02
 HG9Z-2E2PN03
 HG9Z-4K2PN06
 HG9Z-5DFPN01
 HG9Z-SHELLPA

 HG9Z-1D4PN05
 HG9Z-WINDOI
 HG9Z-XU1PN05
 HG9Z-ZSS2W
 HG9Z-2K1
 HG9Z-4K2PN04
 HG9Z

 GWDF1DH485-2
 HG9Z-XCM1
 HG9Z-XJ3
 HG9Z-XJ4
 HG9Z-XJ5
 HG9Z-XT09V
 HG9Z-WINDOI
 HG9Z-XC14
 HG9Z

 XC203
 HG9Z-XC23
 HG9Z-XC23
 HG9Z-XC243
 HG9Z-XC600
 HG9Z-MF64
 HG9Z-MTHW171E

 HG9Z-SCI006
 HG9Z-TK1
 HG9Z-2C112
 HG9Z-2D5
 HG9Z-XC590
 HG9Z-4DC
 HG9Z-4FB
 HG9Z-XC540

 HG9Z-XC550
 HG9Z-XC560
 HG9Z-XC570
 HG9Z-XC580
 HG9Z-XC590
 HG9Z-PK2
 HG9Z-MT10L
 HG9Z-TCM22

 HG9Z-TS1
 HG9Z-MS2
 HG9Z-AC332
 HG9Z-3C155A
 HG9Z-MK1253
 HG9Z-MTHW160D
 HG9Z-PC125A

 HG9Z-1D
 HG9Z-AC322
 HG9Z-AC332
 HG9Z-3C125A
 HG9Z-3C135A
 HG9Z-XC145A

 HG9Z-1D
 HG9Z-AC192
 HG9Z-AC272
 HG9Z-AC282