HG1X Operator Interface

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 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 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.

K

Operator Interfaces

Part Numbers: 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.

Part Numbers: Replacement Parts

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

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088   Phone: 888 SPECTECH
Email: sales@spectechind.com   www.spectechind.com

K-19

WindMSG Software

HG1X Software:
User-friendly WINDMSG software pro-
grams all text message displays. It has a
drop down menus and icons for conve-
nient function selection. Objects are eas-
ily 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.

Part Numbers: Software

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

Includes communication drivers for all major PLC brands: AB-DFI, Mitsubishi, Aromat, Siemens, Koyo, Modicon, Keyence*

Part Numbers: Programming Cable

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

Part Numbers: Cables - Connect between HG1X-252 / 452 to PLC

Manufacturer	Model	Communication Type	Part Numbers
ALLEN BRADLEY	Micrologix Series	RS-232	HG9Z-SCI007
AROMAT	FP0/FPM	RS-232	HG9Z-SCI015
IDEC	Micro 3	RS-232	HG9Z-SCI25A (built-in converter)
	Micro 3C	RS-232	HG9Z-SCI25B
	MicroSmart	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

Part Numbers: Cables - Connect between HG1X-222 / 422 / 822 and PLC

Manufacturer	Model	Communication Type	Part Numbers
ALLEN BRADLEY	Micrologix series	RS-232	HG9Z-SCI100
	SLC 500 series	RS-232	HG9Z-SCI120
AROMAT	FP0/FPM	RS-232	HG9Z-SCI500
IDEC	Micro 3	RS-485	HG9Z-SCI220
	Micro 3C	RS-232	HG9Z-SCI200
	MicroSmart	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

HG1X-252/452 support Micrologix only, HG1X-222/422/822 support Micrologix and SLC 5 00 series PLCs
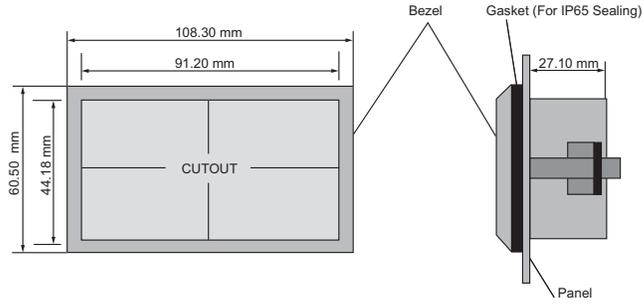
HG1X Specifications

			HG1X-252/HG1X-452	HG1X-222/HG1X-422/HG1X-822
General Specifications	**Standards**	Safety standards	UL508, UL1604	UL508, UL1604
		EMC standards	Immunity to ESD: Level 3 as per IEC 61000-4-2 Transient Immunity: Level 3 as per IEC 61000-4-4 Radiant Immunity: Level 3 as per IEC 61000-4-3 Emissions: EN55011 CISPR A Conducted RF Susceptibility: as per IEC 61000-4-6	Immunity to ESD: Level 3 as per IEC 61000-4-2 Transient Immunity: Level 3 as per IEC 61000-4-4 Radiant Immunity: Level 3 as per IEC 61000-4-3 Emissions: EN55011 CISPR A Conducted RF Susceptibility: as per IEC 61000-4-6
	Electrical	Rated voltage	5V DC	24 VDC
		Voltage variation range	5 VDC (+/-) 5%	24 VDC (+/-) 10%
		Power consumption	HG1X-252: 120mA maximum HG1X-452: 160mA maximum	HG1X-222: 1 watt typical; 3 watt maximum HG1X-422: 1.5 watt; 3 watt maximum HG1X-822: 2.5 watt; 3 watt maximum
		Inrush current	N/A	HG1X-222: 45mA @24 VDC HG1X-422: 55mA @24 VDC HG1X-822: 115ma @24 VDC
	Environmental	Operating temperature range	0 to 55˚C	0 to 55˚C
		Operating humidity range	0 to 90% (non-condensing)	10 to 90% (non-condensing)
		Degree of Protection	IP65 standards	IP65 standards
		Storage temperature	−25 to +80˚C	−25 to +80˚C
		Storage humidity	90% RH	95% RH
		Vibration resistance	10 to 61.2Hz, @ 0.2mm displacement 61.2Hz to 150Hz @ 1.5G acceleration (on all axes)	10 to 61.2Hz, @ 0.2mm displacement 61.2Hz to 150Hz @ 1.5G acceleration (on all axes)
		Shock resistance	1.5G acceleration for 11ms, 2 shocks per sense per axis (on all axes)	1.5G acceleration for 11ms, 2 shocks per sense per axis (on all axes)
	Structural	Installation	Panel mount	Panel mount
		Exterior dimensions (W x H x D in mm)	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

K

Operator Interfaces

Dimensions & Panel Cutout

HG1X-252/HG1X-222 Dimensions/Panel Cutout

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

K

Operator Interfaces