

EZ-SP

Overview

The EZ-SP Set Point panel provides a low-cost, high-performance interface for data display and operator control. The displays have numeric data fields that are linked to the PLC using the EZText Programming Software. During configuration you can designate up to 256 data fields to be either display values or setpoints. The numerical display has super bright seven-segment LEDs for viewing data and adjusting setpoints. The 1x16 LCD screen displays any text associated with the numerical display. There are five control pushbuttons used for message viewing and data input.

Front panel descriptions

Control pushbuttons

There are five control pushbuttons on the front of the panels. When configured using the EZText Programming Software, a message can be set for adjustment using the arrow pushbuttons. The operator can press the arrow buttons to increment or decrement the numeric value. The value will be updated in the PLC only after the enter button has been pressed. The esc button will abort or cancel the adjustment without setting the PLC.



Numeric display

The EZ-SP has an eight-position numeric display with seven-segment LEDs. The LEDs have a super bright intensity for easy viewing of the display. When the panel is configured with the EZText Programming Software, this display will show values from PLC registers.

Character LCD display

The EZ-SP model provides one message line that can display up to 16 characters. The LCD display serves as a message screen for the data displayed in the 8-position LED numerical display. Instead of creating labels to describe the data fields, simply use the software to program the message or label to be displayed with the data.

The PLC Message LED illuminates when the PLC displays register values and its associated text message.

Open. Int.

| Number | Description | Price |
|--------|---|-------|
| EZ-SP | 1x16 LCD display, 8-digit LED display, five control pushbuttons | <---> |

Manual sold separately, EZ-TEXT-SP-M <--->

EZTEXT PANELS SELECTION GUIDE



| EZ Text Panel Specifications | | | | | |
|------------------------------|--|--|--|---|---|
| Part Number | EZ-220 | EZ-220L | EZ-420 | EZ-220P | EZ-SP |
| Price | <---> | <---> | <---> | <---> | <---> |
| Description | 2x20 LCD display, five user defined pushbuttons, five LEDs | 2x20 LCD display, large characters, five user defined pushbuttons, five LEDs | 4x20 LCD display, five user defined pushbuttons, five LEDs | 2x20 LCD display, numeric keypad, five user defined pushbuttons, three tri-color LED annunciators | 1x16 LCD display, 8 digit LED display, five control pushbuttons |
| Display Type | Character LCD, 2 lines by 20 characters w/LED backlight | | Character LCD, 4 lines by 20 characters w/LED backlight | Character LCD, 2 lines by 20 characters w/LED backlight | Character LCD, 1 line by 16 characters w/8 digit .52" LED numeric display |
| Character Height | 5.55mm (0.22") | 8.06mm (0.316") | 4.75mm (0.187") | 5.55mm (0.22") | 8.06mm (0.316") |
| Keypad Overlay | Five user-defined pushbuttons and four control pushbuttons | | | Numeric keypad, five user defined pushbuttons and four control pushbuttons | Four control pushbuttons |
| CPU Type | 8-bit | 8-bit | 8-bit | 8-bit | 8-bit |
| Service Power | 24VDC (20-30VDC operating range) | | | | |
| Power Consumption | 4 Watts @ 24VDC | 4.5 Watts @ 24VDC | 4 Watts @ 24VDC | 5.5 Watts @ 24VDC | 6.5 Watts @ 24VDC |
| Enclosure | NEMA 4, 4X (indoor) | | | | |
| Agency Approval | UL, cUL, CE | | | | |
| Operating Temperature | 0° to 45°C (32° to 113°F) | | | | |
| Storage Temperature | -20° to 60°C (-4° to 140°F) | | | | |
| Humidity | 10-95% RH, (non-condensing) | | | | |
| Electrical Noise | NEMA ICS 2-230 showering arc ANSI C37.90a-1974 SWC Level C Chattering Relay Test | | | | |
| Withstand Voltage | 1000VDC (1 minute), between power supply input terminal and protective ground (FG) | | | | |
| Vibration | 5 - 55Hz 2G for 2 hours in the X, Y, and Z axes | | | | |
| Shock | 10G for under 12 ms in the X, Y, and Z axes | | | | |
| Burn-in | Temperature cycled 96 hours and then fully functional tested | | | | |
| LED/LCD Life | 100,000 hours | | | | |
| Serial Communications | Download/Program/PLC Port RS-232/RS422 15-pin D-sub (female) | | | | |
| Dimensions (in/mm) | 7.418x5.00 (188.419x126.998) | 10.018x5.00 (254.458x126.998) | 7.418x5.00 (188.419x126.998) | 10.018x5.00 (254.458x126.998) | 10.018x5.00 (254.458x126.998) |
| Weight (lbs.) | .65 | .85 | .65 | .85 | .85 |

EZTEXT PANELS SPECIFICATIONS

Introduction



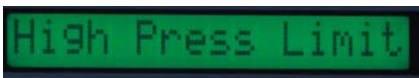
EZText panels provide a low-cost, easy-to-use operator interface alternative for your PLC system. With easy-to-configure Windows-based software and simple installation, you can be connected and running in minutes. If your application requires pushbuttons, LEDs, or text display, but your budget is low, check out our complete line of EZText panels.

Features

The following features are common to all EZText panels:

- LCD display
- Five user-defined pushbuttons (except EZ-SP)
- Five user-defined LEDs (except EZ-SP)
- Up to three embedded PLC data variables (except EZ-SP)
- Built-in menu system
- EMI filtered power supply to reduce communication problems

Display



Depending on the model, the LCD display window supports one, two or four message lines that can display up to 20 characters each (16 on EZ-SP). Messages are programmed using the EZText Programming Software and can be static text, dynamic text, or interactive. The messages are controlled by the PLC program.

Pushbuttons



The panels have sealed membrane pushbuttons that allow you to trigger PLC actions. Each pushbutton can be configured to function as one of three switch types:

Alternate switch — keeps its current state until the button is pushed again

Momentary switch — activated only while the button is being pushed

Set with release switch — similar to the alternate switch except that the PLC can control the release



Compatibility

The EZText panels can be connected to several types of PLCs: Allen-Bradley, GE, Mitsubishi, Omron, and Modicon. Review the PLC compatibility table below to determine if your PLC is supported. With the proper cable and the EZText programming software, you can be easily connected.

Getting started

Below is a quick checklist of what you will need to get started:

- EZText panel
- Programming cable
- 24 VDC power supply
- PLC
- Cable to connect to PLC
- Personal computer
- EZText Programming Software

| PLC Compatibility Table | | | |
|-------------------------|---|--------------------------|--------------------------|
| PLC | Model | Protocols | |
| Allen-Bradley | MicroLogix 1000, 1200 and 1500; SLC 5/03, /04, /05, PLC5 | DF1 | |
| GE | 90/30, 90/70 | SNPX | |
| Mitsubishi | FX Series (all) | Direct, Multidrop | |
| Omron | C200, C500 | Host Link | |
| Siemens | S7 300/400 PLCs, MPI Adapter | 3964R protocol | |
| DirectLOGIC | DL05 DL06 | K-Sequence | |
| | | DirectNet | |
| | DL105 | MODBUS (Koyo addressing) | |
| | | K-Sequence | |
| | DL205 | D2-230 | K-Sequence |
| | | D2-240 | K-Sequence |
| | | | DirectNet |
| | | D2-250-1 | K-Sequence |
| | | D2-260 | DirectNet |
| | | | MODBUS (Koyo addressing) |
| | DL305 | D2-240/250/260 DCM | DirectNet |
| | | D3-330/330P* | DirectNet |
| | | D3-340 | DirectNet |
| | | | K-Sequence |
| | | D3-350 | DirectNet |
| | | | MODBUS (Koyo addressing) |
| DL405 | D3-350 DCM | DirectNet | |
| | D4-430 | K-Sequence | |
| | | DirectNet | |
| | D4-440 | K-Sequence | |
| | | DirectNet | |
| | D4-450 | K-Sequence | |
| | DirectNet | | |
| | MODBUS (Koyo addressing) | | |
| | All with DCM | DirectNet | |
| | H2- WinPLC | MODBUS RTU (serial port) | |
| | H2/H4 EBC (Think-N-Do Studio Version 6.5 or later required) | K-Sequence (serial port) | |

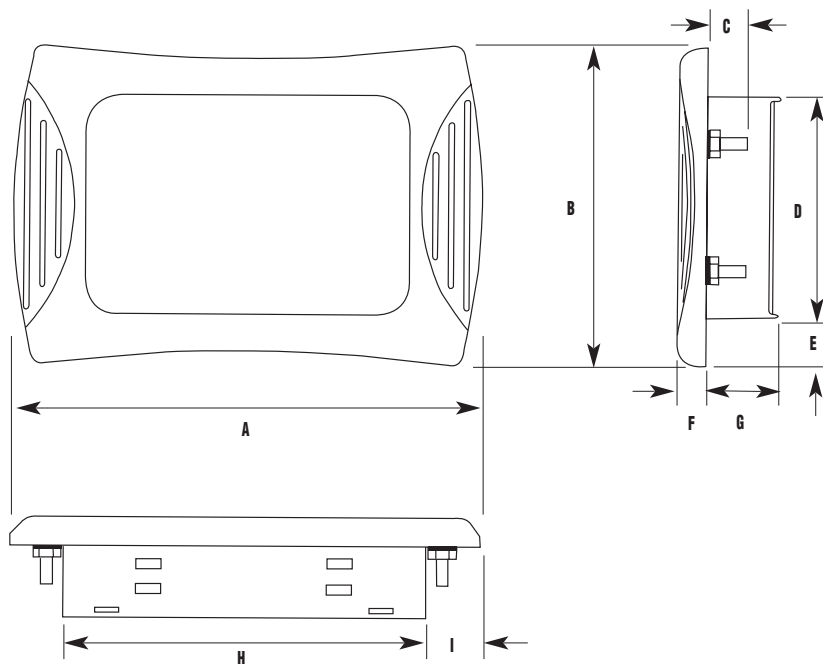
* Requires Data Communications Unit

EZTEXT DIMENSIONS AND INSTALLATION

All EZText panels are designed to be inserted into a rectangular cutout in some type of mounting surface and secured with screws or DIN clips. The four screws that protrude through the mounting surface secure the panel to the mounting surface. A rubber gasket provides a seal between the bezel and mounting surface. When properly mounted, all of the EZText panels comply with the NEMA 4/4X rating for indoor use.

The optional DIN clips are metal brackets that attach to the panel and secure the front panel to a mounting surface with a screw. This provides an alternative mounting solution to a panel or enclosure cutout.

| Dimensions in inches (mm) | | |
|---------------------------|-----------------|------------------|
| Legend | EZ220/420 | EZ220L/220P/SP |
| A | 7.418 (188.419) | 10.018 (254.458) |
| B | 5.000 (126.998) | 5.000 (126.998) |
| C | 0.625 (15.875) | 0.625 (15.875) |
| D | 3.50 (88.9) | 3.50 (88.9) |
| E | .750 (19.05) | .750 (19.05) |
| F | .450 (11.430) | .450 (11.430) |
| G | 1.154 (29.312) | 1.154 (29.312) |
| H | 5.750 (146.050) | 8.350 (212.090) |
| I | .834 (21.184) | .834 (21.184) |



Note: Panels use same mounting dimensions as comparable Optimate panels.

| Mounting Accessories | | |
|------------------------|--|-------|
| Part Number | Description | Price |
| EZ-TEXT-S-GSK | Standard replacement gasket (small) for EZ-220 and EZ-420 | <---> |
| EZ-TEXT-L-GSK | Standard replacement gasket (large) for EZ-220L, EZ-220P and EZ-SP | <---> |
| EZ-BRK-2 | DIN clips (pk. of 4) | <---> |
| EZ-TEXT-STUDS | Mounting studs (pk. of 4) | <---> |
| EZ-COMCON3 | 15-pin male D-sub connector with terminal blocks, for connecting RS422 network cable from EZTouch or EZText panels | <---> |
| EZ-COMCON4 | 9-pin female D-sub connector with terminal blocks | <---> |
| EZ-TEXT-CORE | EZText replacement ferrite cores | <---> |
| EZ-TEXT-PWRTERM | EZText replacement power terminal strip | <---> |