



## IDS 440 PM PANEL MOUNT DIGITAL INDICATOR

### APPLICATIONS FEATURES OPTIONS SPECIFICATIONS

The versatility of the **IDS 440PM** allows you to perform a number of tasks. These range from basic weighing operations to more complex tasks such as controlling batches, check-weighing, or bulk -loading.

The IDS 440 includes, **16 programmable instructions (macros)**, and provides you with the capability of designing the printed record to satisfy your specific requirements. Compact in size and weight, the system is housed in a rugged **panel mount stainless steel enclosure** which can be panel mounted or placed in a control console. Gaskets are provided to seal the panel to the panel or console in which it will be mounted.

**One inch high, seven segment LED** characters make it easier to read from longer distance than most digital indicators. Brightness can be adjusted to suit conditions. The keyboard features large keys which give you tactile and audible confirmation of input.

### APPLICATIONS

**From gross, tare and net weighing to sophisticated trip-level event monitoring.** Applications are unlimited for the user who is capable of writing a basic program. For those who prefer turnkey products, Industrial Data Systems offers a constantly growing number of applications at no additional charge.

## PROGRAM DESCRIPTION

The basic weighing mode features push-button zero, push-button tare and keyboard tare. The display indicates the weight and scale status. The weight data can be transmitted to a printer, scoreboard, computer, etc. Additional functions allow the user or scale technician to program his indicator for his specific application using **Scale Basic**. This is done by entering instructions into the IDS 440 using codes for **addition, subtraction, activating events**, etc. An **Event Monitor** is included to provide user-definable **setpoints** that trigger **relay outputs**. The IDS 440 monitors the weight on the scale and compares it with the setpoint level. When the weight on the scale reaches the setpoint, a relay output is activated. The setpoints are defined in an event record which defines how the set-point is calculated, what relay to activate, and what other function to initiate. **EZ Link**, a windows-based software program, is optionally available to enable **programming on a PC and uploading to the IDS 440**.

## FEATURES

Utilizes latest **Delta Sigma scale technology (60 samples per second)**. Equipped with **two bi-directional serial ports** and one **parallel port** for **TTL I/O** control. TTL signals can be used for relay switching to control traffic lights, alarms, bells, augers, etc. **Lightning protection** suppresses voltage spikes on load cell and AC input lines. Network capable of controlling several units from a master. **Programmable serial data output. Remote control operation.** Provides **Audit Number** for calibration data. **Modifiable print formats** to fit any size ticket. Universal printer interface to most common printers.

## OPTIONS

**Input power option:** 12 to 28 VDC.

**Analog Output:** Provides 4-20ma, 0-20ma, 0-24ma, 0-5v, 0-10v outputs with 16-bit resolution for process control.

**Relay Module:** Housed inside the IDS440, the relay module accommodates eight optically-isolated, solid-state relays. Six output and two input relays are standard but can be modified for eight outputs and no inputs.

**EZ Link:** A windows software program which allows you to perform all configuration and application programming on your computer and upload it to the IDS440. The IDS440 can download information to the EZ Link as well. With EZ Link, you can configure scale parameters I/O ports, print formats, passwords, and set-points. You program with "event -driven programming". EZ Link includes an editor to facilitate writing the program and a compiler to check for errors.

## COMMUNICATIONS

<b>Serial Port 1:</b> .....	RS232 or 20ma current loop.
<b>Serial Port 2:</b> .....	RS232 or RS485.
<b>Parallel Port:</b> .....	Parallel ASCII or 8TTL inputs and 9 TTL outputs.

## SPECIFICATIONS

### GENERAL SPEC.

- **Power:** 120 VAC  $\pm 10\%$ , 50/60 Hz Standard, 230 VAC  $\pm 10\%$ , 50/60Hz available or 12 VDC optional.
- **Power Consumption operating:** 13 watts @ 115VAC, 20 watts @ 12VDC.
- **Size:** 10.40 inches high, 10.90 inches wide, and 3.56 inches deep (26.41 x 27.68 x 9.04 cm).
- **Weight:** 12 lbs (5.4 kg).
- **Operating Temperature:** -10 to +40 °C

### SCALE SPEC.

- **Display:** ..... 1-inch x 6-digit numeric, 5-LED status indicators.
- **Keyboard:** ..... Sealed with tactile feel.
- **Display Graduations:** ..... 200,000 industrial; 10,000 HB44.
- **Display increments:** ..... 1, 2, 5, 10, 20, 50.
- **Decimal Point:** ..... 0 to 4 decimal places.
- **Internal Graduations:** ..... 1,024,000.
- **Conversation Rate:** ..... 60/sec. @ 60 HZ line frequency.
- **Signal Sensitivity:** ..... 0.1 uV/grad (min).
- **Signal Range:** ..... 0.5 mv/V to 6mv/V
- **Load Cell Excitation:** ..... 10 V
- **Load Cell Current:** ..... 240 ma with eight 350 ohm load cells.
- **Auto Zero Tracking:** ..... 0-60 grads @ 1/4 grad increments.
- **Auto Zero Delay:** ..... 0-25 sec. @ 0.1 sec. increments.
- **Digital Filter:** ..... Using advanced DSP algorithm.
- **Digital Calibration:** ..... Features front panel calibration. Zero and Span stored in EAROM.
- **Watchdog Timer:** ..... Fault tolerant operation.



Updated on 3/3/2000