## STANDARD FEATURES

### **SCALE SPECIFICATIONS**

Bright red LED; 1-inch x 6-digit numeric Display Gross, Net, Motion, Zero, LB, Kg (LED) Status Indicators Keyboard 19-key sealed tactile feel membrane Internal Resolution 24-bit A/D Sigma-Delta; 8,000,000 d 120,000 dd industrial: 10,000 dd HB44 Display Resolution Display increments Selectable 1, 2, 5, 10,20, 50 100 **Decimal Point** Selectable 0, 1, 2, 3, 4 decimal places Conversation Rate 60 samples/second typical

Conversation Rate
Signal Sensitivity
Signal Range
Load Cell Excitation

60 samples/second typica
0.1 uV/graduation (min)
0.5 mV/V to 6mV/V
10 ± 0.5VDC (-5 to +5)

Load Cell Power  $12 \times 350 \Omega$  or  $24 \times 700 \Omega$  load cells

Auto Zero Tracking 0-60 dd in 1/4 dd increments

Auto Zero Delay 0-25 seconds In 0.1 second increments

Motion Detect 0-60 dd in 1/4 dd increments

Motion Delay

O-25 seconds In 0.1 second increments

Digital Filter

Calibration

O-18 selectable filter (DSP) levels

Selectable multi-point (up to 5) digital

calibration to linearize input signal
Watchdog Timer Enable/disable fault tolerant operation
RFI Protection Signal, excitation and sense lines

RAM 32K provides 500 ID storage (parts, etc)

### COMMUNICATIONS

Serial Port 1 Simplex RS232 or 20mA current loop
Serial Port 2 Full duplex RS232, 20mA or RS485
Digital Port 6 inputs and 9 outputs; Low active (TTL)
Print Formats 4 user configurable print formats
Parallel Port Centronics compatible ASCII port

### **GENERAL SPECIFICATIONS**

Power 110/220VAC ±10% @ 50/60Hz or 12-28

VDC

Power Consumption 13W @ 115VAC; 8W @ 12VDC

Operating Temperature -10 to +40 °C.
Weight 7.8 lbs (3.54 kg)
Warranty One year limited

Analog Output Module Fully isolated 0-10VDC or 4-20mA; 16-bit

resolution; 650Ω load resistance
Relay Board 6-channel internal relay board
Relay Modules Input/output solid-state (AC/DC) relays
Clock Module Time & Date clock Y2K and Leap Year

compliant

High speed (HS) 100 samples/second conversion rate; High speed process control applications

EZ-LINK™ PC software; Facilitates configuration

and Scale Basic programming

IS Barriers Hazard location intrinsic safety barriers

Panel Mount Panel mount enclosure

Z-Purge Ready

Z-Purge ready enclosure for use with purging system in Hazardous locations

DC operation 12-28 VDC operation

#### **APPROVALS**

NTEP COC# 95-073A1; CSA; UL & CUL

## **MODES OF OPERATION**

The IDS 440 is a versatile indicator for use in various industries and applications that can range from basic weighing, material testing to more complex formula batch weighing. The IDS 440 is housed in a rugged stainless steel enclosure and provides a universal mounting bracket for wall or desk mounting. The viewing angle can be adjusted for the best possible view of the weight. The bright red 1 inch high LED display makes it easy to read the weight from longer distances compared to other indicators. The keyboard features large keys which give you tactile and audible confirmation of data entry. The IDS 440 is programmable in a easy and flexible macro language called Scale Basic™. In addition to the built-in modes of operation, Scale Basic allows you to customize the operation of the IDS 440 to meet your application requirements. The Scale Basic language provides various commands and functions that include: math operations, I/O control, setpoints, timers, data entry, id storage, message display, and program sequence control among others. Programming the IDS 440 can be performed through the keyboard or a PC using the optional EZ-LINK™ software that greatly facilitates setup and programming.

#### **MODE 0 - Normal**

Basic gross, tare and net weighing

**MODE 1 – Fill to Setpoint** 

Single setpoint fill with relay output control and weight print

**MODE 2 - Over/Under Checkweigh** 

Provides 3 TTL outputs and 2 setpoints to indicate over, under and between weight conditions. Outputs can activate lights or alarms

MODE 3 - Vehicle Weigh-In/Out with Totals

Weigh-In/Out program for up to 500 vehicles; Maintains running

totals for each vehicle; Provides reporting functions MODE 4 - Multi-Container/Axle Auto Weighing

Auto weighs and prints each weight placed on the scale; Each weight is sequentially numbered and accumulated; The total can be printed manually or automatically: Provides traffic light control

MODE 5 - Auto Axle Weigh (Long Scales)
Same as Mode 4 but previous axles are auto tared

MODE 6 - ID Tare, Print and Total

Provides tare entry and recall by ID; Prints ID, sequence # and GTN weights; Keeps running totals by ID; Provides reporting functions

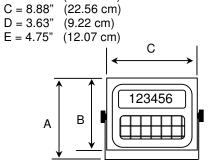
**MODE 7 - Peak Hold Mode** 

A = 9.75" (24.77 cm)

(21.29 cm)

B = 8.38"

Display or print the peak gross or net weight detected





Specifications subject to change without notice © IDS, Inc. 2011 05/10/2011 DS-IDS440.doc

# **APPLICATIONS**

MODEL IDS 440

WEIGHT INDICATOR

- Gross, Tare & Net weighing
- Vehicle and Railroad weighing
- Multi-Container or Axle weighing
- Weigh system interface to Distributed Control System
- Batching and Process control systems
- Drum Filling, Tank, Hopper, Bench, Floor & Counting Scales
- Over/Under Check Weighing and Material Testing
- Chemical and Washdown Environments
- Hazardous Environments with Optional IS Barriers

# **FEATURES**

- Nema 4/4x stainless steel enclosure
- 1 inch high bright bold LED display (6 digit)
- 19-key audible with tactile feel membrane keyboard (sealed)
- 8 selectable modes of operation: Normal; Fill to Setpoint; Over/Under Checkweigh; Vehicle Weigh-In/Out with Totals; Multi-Container/Axle Auto Weighing with Total; Auto Weigh & Print; Auto Axle Weigh with Traffic Light Control (Short/Long Scales); ID Tare, Print & Total; Peak Hold
- Programmable in Scale Basic™ macro language for application development (Event Driven)
- Simulates AND, CONDEC, WEIGHTRONIX, OHAUS communication protocols; User configurable protocol
- Selectable 5-point calibration for improved accuracy
- 24 bit A/D with 60 to 100 samples/second conversion rate
- Signal sensitivity to 0.1 uV/graduation
- Selectable digital filter to eliminate weight vibrations
- Powers up to 12 x 350  $\Omega$  or 24 x 700  $\Omega$  load cells
- Two serial ports (RS232, 20mA current loop and RS485)
- Digital port for relay control and remote operation
- Primary and secondary units with conversion factor
- 32K RAM provides 500 ID storage (part, truck, etc.)
- Selectable address for multi-drop RS485 network interface

# **OPTIONS**

- Time & Date clock Y2K and Leap Year compliant
- 4-20mA/0-10VDC isolated analog output, 16-bit resolution
- 6-channel relay board for setpoint control or remote operation
- Input/output solid-state Relay Modules (AC/DC)
- High speed (HS) 100 samples/second conversion rate
- EZ-LINK™ PC software; Facilitates configuration and Scale Basic programming; Windows® 3.1/95/98/2000 compatible
- Intrinsic safety barriers for Hazardous locations CL I/II/III Div. 1&2 Groups A-G
- Panel Mount enclosure
- Z-Purge ready enclosure for use with purging system in Hazardous locations (CL I/II, Div 2, Groups C-G)
- 12-28 VDC operation









