### STANDARD FEATURES

#### SCALE SPECIFICATIONS
- **Display**: Bright red LED; 1-inch x 6-digit numeric
- **Status Indicators**: Gross, Net, Motion, Zero, LB, kg (LED)
- **Keyboard**: 19-key sealed tactile feel membrane
- **Internal Resolution**: 24-bit A/D Sigma-Delta; 8,000,000 d
- **Display Resolution**: 200,000 dd industrial; 10,000 dd HB44
- **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
- **Signal Sensitivity**: 0.1 uV/graduation (min)
- **Range**: 0.5 mV/V to 6mV/V
- **Load Cell Excitation**: 10 ± 0.5VDC (-5 to +5)
- **Load Cell Power**: 12 x 350 Ω or 24 x 700 Ω load cells
- **Auto Zero Tracking**: 0-60 dd in 1/4 dd increments
- **Motion Detect**: 0-60 dd in 1/4 dd increments
- **Auto Zero Delay**: 0-25 seconds in 0.1 second increments
- **Motion Delay**: 0-25 seconds in 0.1 second increments
- **Digital Filter**: 0-18 selectable filter (DSP) levels
- **Calibration**: 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)
- **Display**: Bright red LED; 1-inch x 6-digit numeric
- **Enclosure**: Mild cold rolled steel with Texture Finish
- **Weight**: 6 lbs (2.72 kg)
- **Power**: 110/220VAC ±10% @ 50/60Hz or 12-28VDC
- **Power Consumption**: 10W @ 115VAC; 6W @ 12VDC
- **Operating Temperature**: -10 to +40°C
- **Parts counting**: Parts counting and weighing program
- **Analog Output Module**: Fully isolated 0-10VDC or 4-20mA; 16-bit resolution; 650Ω load resistance
- **Relay Box**: 4-channel external relay box
- **Relay Modules**: Input/output solid-state (AC/DC) relays
- **Clock Module**: Time and 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 Kit**: Mounts enclosure to user panel (for future release)
- **DeviceNet**: PLC/COM interface (for future release)
- **Profibus**: PLC/COM interface (for future release)

#### APPROVALS
- **NTEP COC**: 96-133-A3

### SPECIFICATIONS

#### COMMUNICATIONS
- **Serial Port 1**: Simplex RS232 or 20mA current loop
- **Serial Port 2**: Full duplex RS232, 20ma or RS485
- **Digital Port**: 3 inputs and 3 outputs; Low active (TTL)
- **Print Formats**: 4 user configurable print formats

#### GENERAL SPECIFICATIONS
- **Power**: 110/220VAC ±10% @ 50/60Hz or 12-28VDC
- **Power Consumption**: 10W @ 115VAC; 6W @ 12VDC
- **Operating Temperature**: -10 to +40°C
- **Enclosure**: Mild cold rolled steel with Texture Finish
- **Weight**: 6 lbs (2.72 kg)
- **Warranty**: One-year limited

#### OPTIONS
- **Parts counting**: Parts counting and weighing program
- **Analog Output Module**: Fully isolated 0-10VDC or 4-20mA; 16-bit resolution; 650Ω load resistance
- **Relay Box**: 4-channel external relay box
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### MODES OF OPERATION

The IDS 433 is an industrial digital weight indicator that outlasts and outperforms any indicator in its class. The unique design of this indicator combines exceptional features with an affordable price. It features a large bright 6-digit LED display and full numeric keyboard with large keys to enhance and simplify operator interface. With its super fine sensitivity and 60 updates/second the IDS 433 delivers consistency and outstanding accuracy. With a Mild cold rolled steel enclosure, standard and optional features, and built-in modes of operation, the IDS 433 is a very versatile indicator for use in various industries and applications that range from basic weighing, material testing to more complex process control weighing.

The IDS 433 is fully programmable in an 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 433 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 433 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
- Display or print the peak gross or net weight detected

### DIMENSIONS

A = 7.63” (19.38 cm)
B = 7.20” (18.29 cm)
C = 8.80” (22.35 cm)
D = 2.00” (5.08 cm)
E = 3.00” (7.62 cm)
INDUSTRIAL DATA SYSTEMS
WEIGHING TECHNOLOGY LEADERS

MODEL IDS 433
WEIGHT INDICATOR

APPLICATIONS
- Gross, tare and net weighing
- Vehicle and railroad weighing
- Multi-container or axle weighing
- Parts counting and weighing
- Weigh system interface to Distributed Control System
- Batching and process control systems
- Drum filling, tank, hopper, bench and floor scales
- Over/Under check-weighing and material-testing
- Hazardous environments with optional IS barriers

FEATURES
- Mild cold rolled steel with polyurethane texture finish enclosure
- One-inch-high bright, bold, 6-digit LED display
- 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 A&D, Condec, Weigh-Tronix, 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 W or 24 x 700 W 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
- Parts counting and weighing program
- Time and Date Clock Y2K and Leap Year compliant
- 4-20mA/0-10VDC isolated analog output with 16-bit resolution
- 4-channel relay box for setpoint control or remote operation
- Input/output solid-state relay modules (AC/DC)
- High-speed 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 Class I / II / III Div. 1and 2 Groups A-G
- Panel mount kit (for future release)

MADE IN U.S.A.