STANDARD FEATURES

SCALE SPECIFICATIONS

Display	Bright red LED; 1-inch x 6-digit numeric
Status Indicators	Gross, Net, Motion, Zero, LB, kg (LED)
Keyboard	5-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)
Signal Range	0.5 mV/V to 6mV/V
Load Cell Excitation	$10 \pm 0.5VDC$ (-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
Auto Zero Delay	0-25 seconds In 0.1 second increments
Motion Detect	0-60 dd in 1/4 dd 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)

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 12-28 VDC
Power Consumption	10W @ 115VAC; 6W @ 12VDC
Operating Temperature	-10 to +40 °C.
Weight	6 lbs (2.72 kg)
Warranty	One-year limited

OPTIONS

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

MODES OF OPERATION

The IDS 422 is the only digital weight meter in its class that 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 422 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 422 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 – Print Weight and Total (Numbered Weights)
Prints numbered weights with a total of accumulated gross, tare or net weights
MODE 2 - Auto Print and Total Weighing/Multi-Container/Pallet
Auto prints multiple numbered gross or net weights and keep a running total for a job, lot, pallet, truck etc. Prints accumulated gross tare and net totals when finished.
MODE 3 - Unattended Axle Weigh and Print (Short Scale)
Unattended short scale vehicle axle weighing application provides traffic light control, remote display interface and auto finish totaling
MODE 4 - Auto Axle Weigh (Long Scales)
Same as Mode 3 but previous axles are auto zeroed for long scale.
MODE 5 - Peak Hold Mode (Force Measurement)
Display or print the gross or net of detected peak force/weight
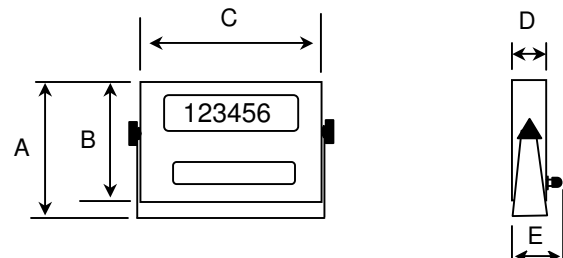**MODE 6 - Over/Under Checkweigh**
Provides 3 TTL outputs and 2 setpoints to indicate over, under and between weight conditions. Outputs can activate lights or alarms
MODE 7 - Bulkweigh
Provides setpoint entry and relay output to control fill process. Remote start/stop operation with configurable scale empty and draft weights. Use for multiple drafts with subtotal and total printing

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)

MODEL IDS 422

WEIGHT INDICATOR

APPLICATIONS

- Gross, tare and 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 and floor scales
- Over/Under check-weighing and material-testing
- Hazardous environments with optional IS barriers
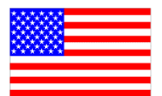
FEATURES

- Mild cold rolled steel with polyurethane texture finish enclosure
- One-inch-high bright, bold, 6-digit LED display
- 8 selectable modes of operation: Normal Gross, Tare & Net, Print weight and total, Auto print weight and total, Unattended axle weighing short and long scales with traffic light control, peak hold, over/under checkweigh, and bulkweigh
- 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 or 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 Ω or 24 x 700 Ω 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 for part, truck, etc.
- Selectable address for multi-drop RS485 network interface

OPTIONS

- 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/XP/Vista 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.