IQ 700HB   Digital Weight Indicator

NTEP *Measurement Canada Approved* **CSA**®

PART #	DESCRIPTION
19191	.... IQ 700HB LED display, 115 VAC
34752	.... IQ 700HB LED display, 230 VAC

The IQ 700HB is an AC-powered indicator with a bright LED display and is part of our board-compatible series of indicators and scales. It is designed for general weighing and truck scale applications.

The IQ 700HB features a 300-truck ID memory and versatile setpoint capabilities as standard equipment. These improved software capabilities give the IQ 700HB the flexibility to monitor truck IN/OUT operations or control various process control operations like filling and checkweighing. Other standard features include dual serial ports (one bidirectional), gross/tare/net printout, power for eight 350-ohm load cells, and two programmable setpoints. Its NEMA 4X stainless steel enclosure protects electronics in demanding environments.

Applications

- Truck scales
- Industrial weighing
- Filling and checkweighing

Standard Features

- Bright Light Emitting Diode (LED) display
- AC power
- Stainless steel NEMA 4X enclosure
- Front-panel digital calibration
- Automatic zero and span temperature compensation
- Excitation for eight 350Ω load cells at 10 VDC
- Two fully programmable setpoints with "Zero Band"
- Two serial ports offering bidirectional RS-232 and simplex RS-232 or 20 mA current loop
- Gross/Tare/Net computation
- Time and date
- Accumulator
- 300-truck ID memory
- Versatile tilt stand
- Set-up parameters printout

Options/Accessories

30352	...... KBT7116-5 Panel mount kit
19281	...... 2 Unlatched solid state output relays
15959	...... Unlatched dry contact 4-relay board
19576	...... BCD output (external)
19578	...... Analog output 0-10 VDC, 4-20 mA
22922	...... Analog output 0-10 VDC, 4-20 mA (internal mount)
55662	...... Combination relay and analog board
16815	...... Technical manual
16821	...... Additional operating manual

LOAD CELL EXCITATION:
10 VDC, fixed, short-circuit proof

LOAD CELL CURRENT:
240 mA maximum (8 x 350Ω load cells)

LOAD CELL CABLING:
4- or 6-wire selective

ANALOG SIGNAL INPUT RANGE:
0.6 mV/V - 3.33 mV/V

ANALOG SENSITIVITY:
0.3 microvolts/graduation minimum

TRANSIENT OVERLOAD PROTECTION:
±100 VDC without damage—100 microsecond duration at 2% duty cycle

CONVERSION RATE AT FULL SCALE:
10 updates per second, typical

INTEGRATION TIME:
17 milliseconds to 28 milliseconds

RESOLUTION:
80,000 displayed graduations
100,000 internal graduations

DISPLAY BLANKING:
Occurs at 103% of selected capacity

DISPLAY INCREMENTS:
1, 2, 5, 10, 20, 50, 100

UNDERRANGE BLANKING:
400 graduations, typical

OVER/UNDER CAPACITY ANNUNCIATION:
OL = overload, UL = underload

LEAD ZERO BLANKING:
Standard, per NIST H-44 requirements

DISPLAY:
IQ 700HB: Six red Light Emitting Diode (LED) digits, 0.6" (15.2mm)

POLARITY INDICATION:
" – " sign

DECIMAL POINT:
Selectable—888888, 88888.8, 8888.88, 888.888, 88.8888, 8.88888, 888880, 888800

LB/KG SWITCHING:
Front-panel selectable, can be disabled

FRONT-PANEL CONTROL SWITCHES:
Zero, Gross/Net, Auto Tare, lb/kg conversion, Print, Tare Recall, SP1, SP2 and Data Entry Keys

FRONT-PANEL ANNUNCIATORS:
Center Zero, Net, Gross, lb, kg and Motion (LED)

SERIAL OUTPUTS:
Port 1: Bidirectional RS-232 or 20 mA.
Port 2: Simplex RS-232 or 20 mA current loop; truck IN/OUT only on port 2

AZM: (ZERO TRACK)
"Gross" mode only

SETPOINTS:
2 bi-polar setpoint outputs, TTL compatible equipped with "zero band" which operates at a programmable number of graduations around zero

AZM CAPTURE RANGE:
Selectable: Off, ±0.5, ±1, ±3 graduations

AZM APERTURE:
Selectable: ±1.9% full scale, 100% internal selectable

WEIGHT AVERAGING:
8 internal selections

MOTION BAND:
Selectable: ±1, ±3, ±5, ±10 graduations

ZERO BAND:
Selectable: Off, 1, 2, 3, 4, 5, 6, 7, 8, 9,10 graduations

POWER INPUT:
115 VAC at 20 watts at 50/60 Hz (Optional 230 VAC, 50 Hz)

POWER CONSUMPTION:
20 watts typical

DISPLAY CHECK:
All digit segments and annunciators sequentially illuminated upon power application

OPERATING TEMPERATURE:
14°F to 104°F (-10°C to 40°C)

RATING/MATERIAL:
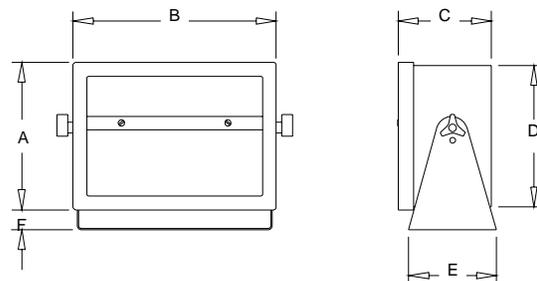NEMA 4X stainless steel

WEIGHT:
9.5 lb (4.31 kg)

APPROVALS:
NTEP certified per H-44 at 10,000 Divisions, Class III/IIIL, CC# 89-023A2; Measurement Canada approved, S.WA-4131; CSA

WARRANTY:
One year limited warranty

DIMENSIONS	
A = 6.62" (168.1mm)	D = 6.34" (161.0mm)
B = 9.12" (231.6mm)	E = 3.94" (100.1mm)
C = 4.18" (106.2mm)	F = 0.90" (22.9mm)

RICE LAKE WEIGHING SYSTEMS
Industrial Solutions on a Global Scale