



# DIGITAL INDICATOR

## applications

- Laboratory Measurements
- Force, Torque or Pressure
- Process Control
- Weighing Applications
- O.E.M. Requirements

## features

- 260,000 Count Resolution
- 50,000 Display Digits
- Universal Mounting Stand
- 0.02% Accuracy Class
- Digital Filtering
- RS 232 Serial Interface
- Peak Hold Option
- Stainless NEMA 4/4X Option
- One Year Warranty

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KB3 LED Display

KB3-C LCD Display

The KB Series is a high performance, compact, multi-featured digital indicator. This very versatile indicator is designed as a companion instrument for load cells, force transducers, torque transducers, pressure transducers, weighing systems and virtually any bonded foil strain gage-based transducer. The durable ABS enclosure (KB3 & KB3-C) is fitted with a universal mounting stand, providing a convenient means of securing the indicator to any flat surface and rotating it to achieve an optimum viewing angle. The easy-to-read display is a .56" bright green LED character display, with status annunciators. A .75" LCD version (KB3-C) is available, as is a NEMA 4X stainless steel enclosure (KB2). Both the KB3-C and the KB2 are battery-powered. The 5-key touchpad makes setup and operation of the KB Series guick and simple. Good display resolution, a programmable digital filter and a peak hold feature allows the user to readily configure the KB Series for a broad range of measurement tasks. The RS232 interface facilitates communication with a PC or serial printer. This port can also be used for connection to a remote display device. The attributes of the KB Series make it an ideal choice for measurements in the laboratory, manufacturing, weighing situations, and for general measurements where a versatile, low cost precision indication solution is needed.



KB2 Stainless Steel LCD Display



### operator interface

Display: LED: .56" High; Bright Green; 7-Segment Digits; Full 6 Digit Numeric Display

LCD: .8" High; 7-Segment Digits; 6 Digit Numeric Display plus sign Status Annunciators:

7 (LED) - 8 (LCD); Indicate "Gross", "Net", "Tare" "Motion", "Zero", "Ib" & "kg"

5-Key; Tactile Feedback

KB3: 50,000 dd (max.); KB3-C & KB2: 199,999

1, 2, or 5; Selectable

Up To 6 Settings; Selectable

0 To 5 Graduations; Minimum 0.5 Graduations

1, 3, 5 or 10 Graduations

Keypad Programmable; Dynamic Response Conditioning

Digital; Keypad; System Zero and Span Values Stored in Battery-Backed Memory

#### function

Keypad:

Display Resolution:

Display Increments:

Auto Zero Tracking:

Calibration Method:

Span Range @ Full Scale:

**Excitation Voltage:** 

Current Rating:

Power:

Weight:

Warranty:

Motion Detection:

Decimal Point:

Digital Filter:

Linearity: Better Than Or Equal To 0.02% Full Scale (FS)

KB3: 18-Bit, 260,000 Grads; KB3-C 130,000 Grads; KB2 150,000 Grads Internal Resolution: Measurement Rate: KB3: 25 Updates Per Second; KB3-C & KB2: 8 Updates Per Second Signal Sensitivity:

.4 mV Per Graduation (maximum)

30 mV (maximum)

KB3: 10 VDC (Nominal); KB3-C & KB2: 5 VDC (Nominal) KB3: 200 mA (Nominal); 1-4 Summed 350  $\Omega$  Bridges

KB3-C & KB2: 80 mA (Nominal); 1-4 Summed 350  $\Omega$  Bridges (add 30 mA/350  $\Omega$  Bridge) KB3: 115 VAC ±10% @ 50/60Hz (Incl. external 12 VDC/500 mA/15 Watts supply power) KB3-C & KB2: 6-Volt Rechargeable Lead Acid Battery; 20 hr Operation; 16 hr Recharge

3 pounds (1.3 kg)

1 Year; Limited

#### communications interface

Port 1: RS-232; 1200 To 9600 Baud; Full Duplex Serial Ports:

Data Format: 8 Bits; No Parity; 1 Stop Bit 7 Bits; Odd Parity; 1 Stop Bit (PC Compatible) 7 Bits; Even Parity; 1 Stop Bit 7 Bits; No Parity; 2 Stop Bits

Compensated Temperature Range: -10° To +40° C / 14° To 104° F



#### environmental

RFI Protection:

-18° To +50° C / 0 To 122°F Operating Temperature Range: Storage Temperature Range -25° To +70° C / -13° To 158° F

Humidity Range: KB3: ABS Enclosure: 0 To 90% RH; Non-condensing

KB2: Stainless Steel Enclosure: 0 To 100% RH; Washdown-Ready

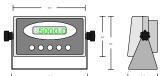
Multi-Layer PCB

Surge Voltage Protection: Excitation And Signal Lines; AC Power Line

**Enclosure Construction:** KB3 & KB3-C: ABS; High Impact Plastic; Universal Mounting Stand KB2: 304 Stainless Steel; Universal Mounting Stand; NEMA 4/4X

KB3: ABS: 3.2" tall X 6.75" wide X 2.38" deep (81 mm X 171 mm X 60 mm) **Enclosure Dimensions:** KB3-C: ABS: 5.9" tall X 10.1" wide X 3.94" deep (150 mm X 257 mm X 100 mm)

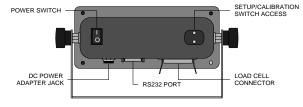
KB2: Stainless Steel: 5.51" tall X 8.86" wide X 2.83" deep (140 mm X 225 mm X 72 mm)



KB3-C ABS LCD Display



**KB2 Stainless Steel LCD Display** 



**KB3 ABS LED Display**