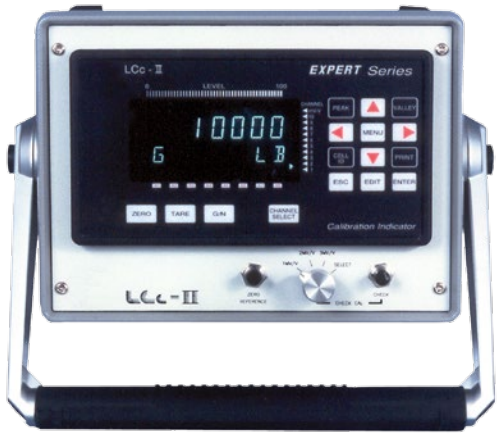
Load Cell Calibrator

FEATURES

- Ten calibration registers with 10 point linearization curves
- BLH Nobel Quick Cal, 10 point deadload, or 10 point data sheet calibration available for each register
- An additional register reads live load cell mV/V
- Display “Hold” function
- Optional 16 bit analog output configurable for each register
- Peak and valley capability for each register



APPLICATIONS

- Force calibration systems
- Dynamometers
- Test standards

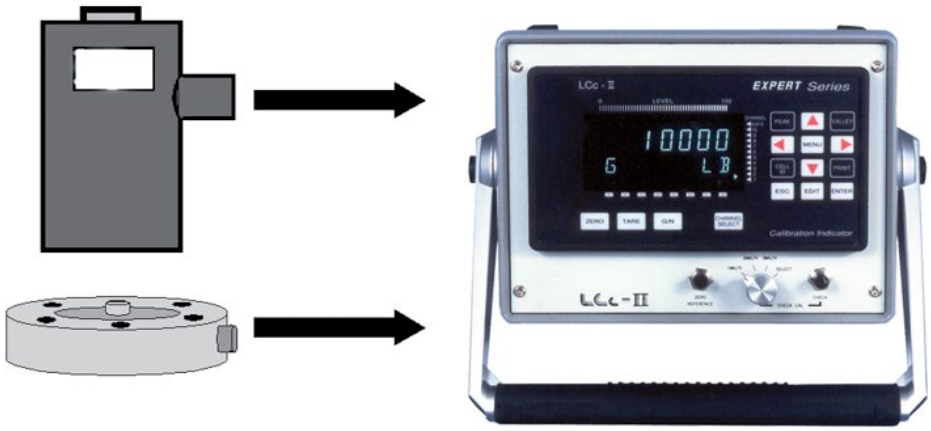
DESCRIPTION

The LCc-II load cell calibration indicator uses microprocessor technology to store ten individual, ten point linearized, load cell calibration curves. This capability allows this device to be used as a calibration force measurement indicator with up to ten different load cells. In addition, the LCc is pre-configured at the factory to read actual load cell mV/V outputs for use as a measurement standard with virtually any load cell or other Wheatstone bridge based transducer. For portability, a ruggedized enclosure with transducer selection switch and carry handle is provided. If documentation is required, units have a serial printer communication interface.

Hot key displays provide instant access to cell mV/V output, peak, valley, zero, and tare values. To check calibration, three standard values are switch selectable along with a fourth provision for a user supplied resistor. Rear panel tension or compression selection reverses polarity if needed. Signal communication is available in 16 bit analog output and RS-422/485 digital formats. The RS-422 signal can be used for printouts or a full, bi-directional PC interface.

When combined with master (NIST calibrated) load cells, the LCc-II becomes a highly accurate system for checking and calibrating other force and weight measurement equipment.

CONFIGURATION



BLH NOBEL
A VPG Brand

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SPECIFICATIONS

PARAMETER	VALUE
PERFORMANCE	
Resolution	1,048,576 total counts
Displayed Resolution	700,000 counts
Conversion Speed	50 ms
Displayed Sensitivity	0.05 µV per count
Noise	0.4 µV per count (min. tilt. setting)
Full Scale Range	3.5 mV/V
Dead Load Range	100% full scale
Input Impedance	10 mΩ min.
Excitation Voltage	10 VDC @ 250 mA
Linearity	±0.0015% full scale
Software Filter	multi-variable up to 10,000 ms
Step Response	one conversion
Temp Coefficient Zero	±2 ppm/°C
Temp Coefficient Span	±7 ppm/°C
ENVIRONMENT	
Operating Temperature	–10 to 55°C (15 to 131°F)
Storage Temperature	–20 to 85°C (–5 to 185°F)
Humidity	5 to 90% RH non-condensing
Voltage	115/240 VAC +15% @ 50/60 Hz
Power	15 W max.
ENCLOSURE	
Dimensions (std)	8.5×12.3×10.6 in H×W×D

PARAMETER	VALUE
DISPLAY	
Type	high intensity amber LED display
Active Digits	7 digit alpha numeric 0.59 in high for weight 8 digit alpha numeric 0.39 in high for status
REMOTE HOLD INPUT (OPTICALLY ISOLATED) (CONTACT CLOSURE OR DC LOGIC COMPATIBLE)	
Closed	hold
Open	normal operation
COMMUNICATIONS (STANDARD)	
Serial RS-422/485	full or half duplex ASCII, printer, Provox, Modbus, or BLH network protocols; odd, even or no parity-selectable
Baud Rates	300, 1200, 2400, 4800, 9600 or 19200
ANALOG OUTPUT (OPTIONAL)	
Conversion	16 bit D-A
Current Output	0–24 mA – 500 Ω max.

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