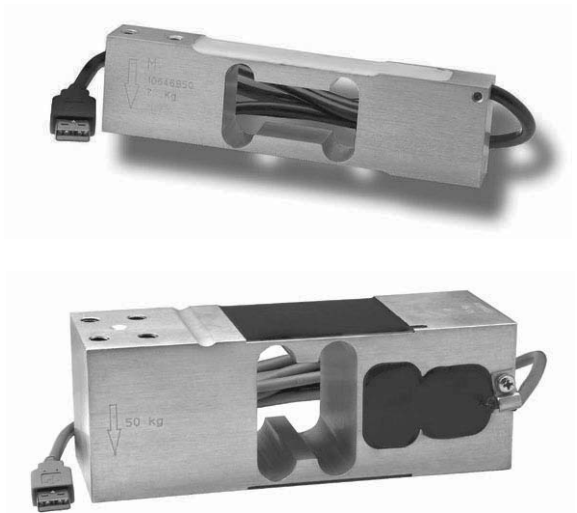


## High-Performance Digital Load Cell Interface



### FEATURES

- USB (Universal Serial Bus) 2.0 interface
- Weighing functionality: zero, tare, initial zero setting, automatic zero tracking, unit conversion, and more
- Full setup and calibration through the USB interface
- Simple calibration, test and setting via Revere's software, or HyperTerminal program
- Suitable for PC-based, or PLC-based applications
- Gravity factor compensation
- CE Compliance

### DESCRIPTION

The Model DLC09 is a high performance digital load cell with USB interface to a PC. Just connect and start measuring, no need for power supply, or special software.

With DLC09 technology, most analog load cells can be converted to a full-function digital load cell. The interface circuit board can be embedded in the load cell (space permitting), or installed in a sealed connector housing attached to the USB cable.

Calibration, setup and operating functions are available through the USB port. DLC09 Open Protocol allows easy access to all configuration and calibration parameters.

DLC09-enabled summing junction boxes offer digital interface for multiple load cell scales.

### APPLICATIONS

- PC-based systems
- Inventory control
- Load/force monitoring
- Load cell digitizers
- OEM machinery

## High-Performance Digital Load Cell Interface

<b>SPECIFICATIONS</b>					
<b>PARAMETER</b>	<b>SYMBOL</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNIT</b>
Bridge input					
Bridge excitation	$V_{exc}$	4.8	5.0	5.2	V
Bridge resistance	$R_{LC}$	79	350	10k	$\Omega$
Full scale input signal	$F_S$	2.50	10.00	19.50	$\pm mV$
Common mode voltage		1.50	2.50	3.50	V
USB Bus - 2.0 Full speed compatible					
Supply voltage	$V_p$	4.75	5.00	5.25	V
Max. supply current (with four 350 $\Omega$ load cells)			41	62	mA
Over voltage protect				6	V
ESD capability (D+, D-)				2000	V
Reverse power protection				yes	
Output type		USB with virtual com port, protocol defined by Revere			
Virtual com port					
Baud rate			115200		Bit/sec
Data bits			8		Bits
Start bits			1		Bits
Stop bits			1		Bits
Max. cable length			5		m
Performance					
Input impedance		$10^7$			$\Omega$
Internal resolution			24		Bits
Noise (Ref to input, filter 1/1/2, warm up 2 hours, catch 2 minutes)			0.2	0.3	$\mu V$ p-p
Digital filters		3 stage filters, software selectable			
Measurement rate			10 or 80		Hz
Zero stability (-10 ~40°C)			3.2	6.5	$\pm ppmF_S/^\circ C$
Gain stability (-10 ~40°C)			2.3	3.7	$\pm ppmF_S/^\circ C$
Typical OIML $V_{min}$ value (2mV/V)			10000		
Software upgrade		Download new software via USB without hardware setting			
Environmental Conditions					
Specification temperature (Full performance)	$T_S$	-10	+20	+40	$^\circ C$
Operating temperature		-40		+85	$^\circ C$
Storage temperature		-40		+85	$^\circ C$
Drop test (Concrete surface)				1.5	m
Power supply		Power from USB			

## Disclaimer

All product specifications and data are subject to change without notice.

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