

# Load Cell Central

1-800-LOADCEL

## Model: AHM

### Portable Handheld Load Cell Display

The Load Cell Central AHM is a completely portable strain gauge, battery powered digital indicator, packaged in a small, rugged IP65/NEMA 4 enclosure.

The six-key control pad simplifies use. The AHM can store calibration data for two load cells or allow dual range setup (lb to Kg, g to kg, etc.). The menu options offer the ability to tailor the instrument's response to the application. Gross, net, peak, and valley measurements are easily selected. Display symbols indicate which range or sensor has been selected. There is also a window to insert a legend describing each range. Once these parameters are set, it provides the user with the simplest of indicators.



## Features:

- Powered by 2 AA batteries
- Portable handheld precision instrument weighing only 0.6 lbs
- Tactile keyboard with dual range selection, peak/valley hold, gross/net, and on/off controls
- Microprocessor based allowing single pass calibration facility
- Dual range capability
- Input range of up to 50 mV / V
- Environmentally sealed to IP65 / NEMA 4
- 7 1/2 digit LCD display with battery, peak, valley, net, and shunt cal indication
- 1 year warranty
- Adjustable auto sleep

## Specifications:

Description	Minimum	Typical	Maximum	Units
Non-Linearity		0.001	0.005	% FS
Internal Resolution		24		Bits
Resolution at 1 Hz Sample Rate		250,000		Counts / divisions
Resolution at 10 Hz Sample Rate		65,000		Counts / divisions
Temperature effect on zero		0.0002	0.0007	+/- % FS / °C @ 2.5 mV / V
Temperature effect on span		0.0002	0.0005	+/- % / °C
Offset stability		0.002	0.008	+/- % FS from original offset at any time
Gain stability		0.003	0.01	% per annum
Excitation voltage	4.8	5	5.2	VDC
Strain gauge impedance	85	350	5,000	Ohms
Sensitivity full range, setting 1	-5		+5	mV / V
Sensitivity full range, setting 2	-50		+50	mV / V

Load Cell Central follows a policy of continuous improvement and reserves the right to change specifications without notice. © 2015

**Load Cell Central**  
28175 Route 220  
Milan, PA 18831

Web: [www.800loadcel.com](http://www.800loadcel.com)  
Email: [sales@800loadcel.com](mailto:sales@800loadcel.com)

**Toll Free: 1-800-562-3235**  
Ph: 1-570-731-7048  
Fax: 1-570-731-7054

## Performance

Input type:	Strain gauge full bridge sensors
Internal Battery:	2 AA alkaline, access via sealed rear compartment. Batteries are included.
Battery Life:	35 hrs with 350 $\Omega$ sensor continuously on (or up to 5,000 hrs in low power mode)
Update Rate:	10 ms to 2 s including peak / valley hold capture rate

## Control Variables

Front Panel User Keys:	Tactile Keys For:	
	On / Off / Trough	Switches AHM power on / off / displays trough ("valley") reading
	Range	Selects between two ranges or two transducers
	Peak	Displays peak reading
	Hold	Switches hold on / off
	Gross / Net	Toggles between gross and net readings
	Shunt Cal	Shunt calibration mode (100k $\Omega$ resistor)

Settable Parameters	Display Resolution
	Rate 0.5, 1, 3, 10, 25 Hz
	Low power modes
Calibration	By front panel keypad buttons protected by key sequence

## Ordering Information

Ordering code:	Description:
AHM	Portable display load cell / force indicator & mating connector, 10' RS232 cable with DB9 connector, leather carry case
Weightlogger-AHM	RS232 data logging software
AHM-RB	Internal rechargeable battery option

## Environmental

Storage Temp	-40 to 65°C (excluding batteries)
Operating Temp	-10 to 50°C (excluding batteries)
Environmental Rating	IP65 / NEMA4 (with mating plugs fitted)
Enclosure Type	ABS, dark grey (black leather carry case)

## Physical

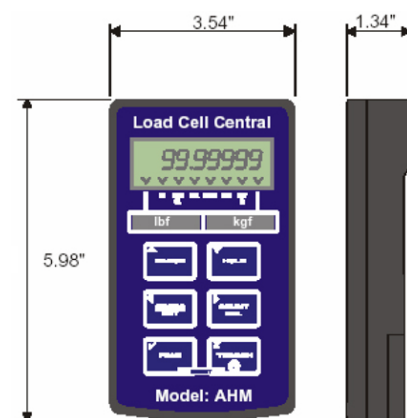
Electrical Connection	5 pin binder socket (mating plug included)
Dimensions	3.54" x 5.98" x 1.34" (90 x 152 x 34 mm depth)
Weight	0.6 lbs
Legends	Insert legend labels for engineering unit identification

## Options

Easy to use PC acquisition program exports weight and time & date information directly to an Excel file  
Rechargeable batteries and charger

## Indication

Display Type	7 1/2 digit LCD display, 0.35" (8.8 mm) high digits
Display Resolution	1 part in 250,000 at 1 s update
Annunciators	Low battery warning, peak, trough, hold, net, shunt cal, and range by symbols on the LCD display



Load Cell Central follows a policy of continuous improvement and reserves the right to change specifications without notice. © 2015

Load Cell Central  
28175 Route 220  
Milan, PA 18831

Web: [www.800loadcel.com](http://www.800loadcel.com)  
Email: [sales@800loadcel.com](mailto:sales@800loadcel.com)

Toll Free: 1-800-562-3235  
Ph: 1-570-731-7048  
Fax: 1-570-731-7054