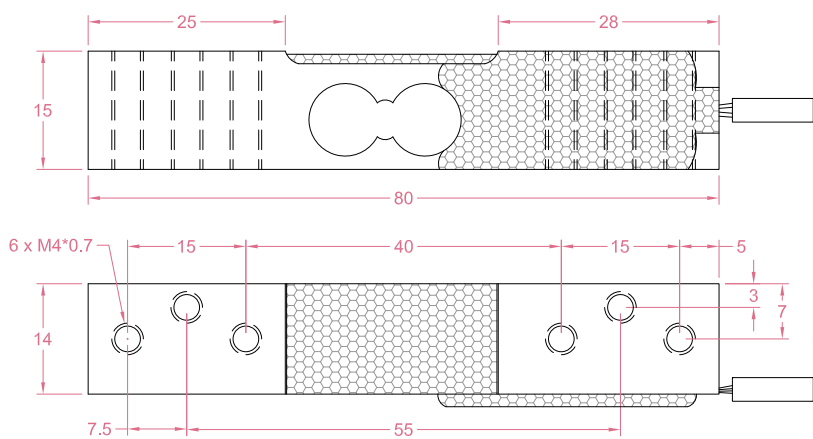
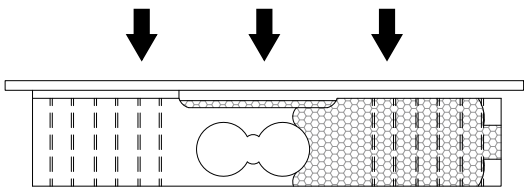


Dimensions in “mm”



Suitable for off center load measurement.
Platform size goes up to 150x150mm



Wiring code	
Red	Power+
Black	GND
Green	A / RD
White	B / TD

Ordering part No.: Model-Interface-Baud rate-Capacity-Cable length				
Model	Interface	Baud rate	Capacity	Cable length
RTUA	485: RS485 232: RS232	A: 115200 B: 57600 C: 38400 D: 19200 E: 9600	2kg 5kg 10kg	Specified by customer
Example: RTUA-485-A-10kg-0.4m means: Model: RTUA Interface: RS485 Baud rate: 115200 Capacity: 10kg Cable length: 0.4 meters				
Minimum order quantity: 5pcs Please consult sales for other specifications.				

Specifications			
Rated Capacity	2kg	5kg	10kg
Resolution	0.0001kg(0.1g)	0.0002kg(0.2g)	0.0005kg(0.5g)
Output	RS485 or RS232	Safe Load Limit	150% F.S.
Excitation	5~12V DC	Operating Temp.	-20...+60°C
Nonlinearity	±0.02% F.S.	Temp. Coeff. of Zero	±0.005% F.S./°C
Hysteresis	±0.02% F.S.	Temp. Coeff. of Span	±0.003% F.S./°C
Nonrepeatability	±0.01% F.S.	IP Rating	IP62
Creep(30min)	±0.02% F.S.	Element Material	Aluminum alloy
Cable	OD 3mm, 4-conductor, length specified by customer		

• LCS reserves the right to modify its design and specifications without notice

Modbus RTU protocol

Data format: 1 start bit, 8 data bits, no parity check, 1 stop bit.

Function code

Function code	Description
03	Read data(R)
10	Write data(W)

Register address and content

Register address	Corresponding content/function
0001	Weighing data
0001	Zero point calibration
0007	Zero resetting(Tare)
000F	Load cell address

Command: Set load cell address (Can be set before shipment)

Send command: FF 10 00 0F 00 02 04 00 00 00 nn CRC16

Broadcast code
Function code
Register address
No. of register
No. of byte to be written
Address

Return data: nn 10 00 0F 00 02 CRC16

Address code
Function code
Register address
No. of register

Note: Only one address can be set at a time. To set address for multiple load cells, clients need to connect one sensor at a time and set the address one by one.

Command: Zero point calibration (Saved when power off)

Send command: nn 10 00 01 00 02 04 00 00 00 01 CRC16

Address code
Function code
Register address
No. of register
No. of byte to be written

Return data: nn 10 00 01 00 02 CRC16

Address code
Function code
Register address
No. of register

Example: (Zero point calibration for address 01) :

Send: 01 10 00 01 00 02 04 00 00 00 01 F3 A3

Return: 01 10 00 01 00 02 10 08



Command: Zero resetting (Tare, NOT saved when power off)

Send command: nn 10 00 07 00 02 04 00 00 00 01 CRC16

Address code Function code Register address No. of register No. of byte to be written

Return data: nn 10 00 07 00 02 CRC16

Address code Function code Register address No. of register

Function: Tare current weight value

Example: (Tare the sensor with address 01) :

Send: 01 10 00 07 00 02 04 00 00 00 01 73 89

Return: 01 10 00 07 00 02 F0 09

Command: Read weighing data

Send command: nn 03 00 01 00 02 CRC16

Address code Function code Register address No. of register

Return data: nn 03 04 HG FE DC BA CRC16

Address code Function code No. of byte returned Weighing data

H=0: Positive
H=1: Negative
G=0: Not stable
G=1: Stable

F: Decimal places
EDCBA: Weight value in hex without decimal point

Example one (Weight value -1.000) :

Send command: 01 03 00 01 00 02 95 CB

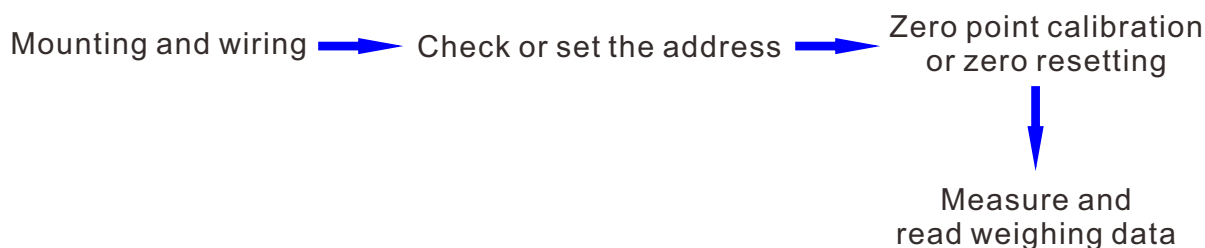
Return data: 01 03 04 11 30 03 E8 FF BE

Example two (Weight value 120.000) :

Send command: 01 03 00 01 00 02 95 CB

Return data: 01 03 04 01 31 D4 C0 F5 50

Load cell operating procedures:



Note: The sensor will be calibrated before shipment. If customer wants to recalibrate the sensor, we will send the calibration procedures after confirming the parameters with the customer.

