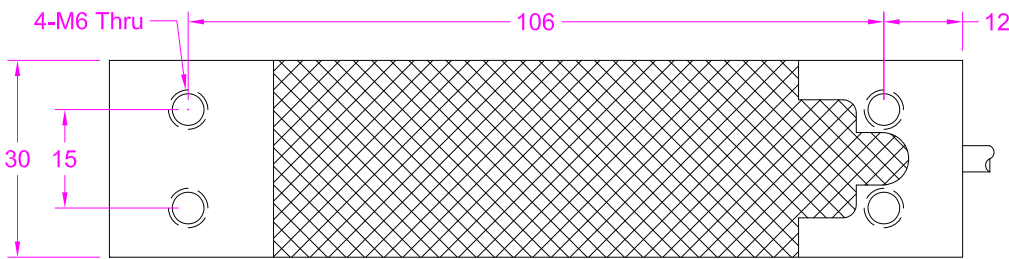
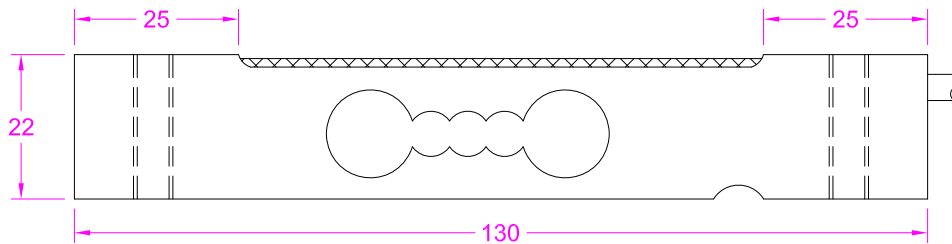
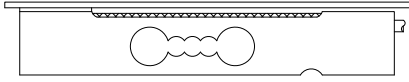


Load direction/加载方向
(Platform sizes up to 300x300mm)



Ordering code

FDNB - 10kg - RS485

Model Capacity Output

Wiring code	RS485	RS232
Red	Power+	Power+
Black	Power-	Power-/GND
Green	A	RXD
White	B	TXD

--- Specifications / 规格参数 ---

Capacity/量程	3/6/10/20/30/40 kg		
Output 输出	RS485/RS232 (Modbus RTU)	Safe Overload 安全过载	150% of F.S.
Excitation 激励电压	5~12V DC	Operating Temp. 工作温度范围	-20...+60°C
Nonlinearity 非线性	±0.02% of R.O.	Temp. Shift Zero 零点温度漂移	±0.02% of R.O./10°C
Hysteresis 滞后	±0.02% of R.O.	Temp. Shift Span 灵敏度温度漂移	±0.02% of R.O./10°C
Nonrepeatability 非重复性	±0.01% of R.O.	Material of Element 弹性体材料	Aluminum alloy 铝合金
Creep(30min) 蠕变(30min)	±0.02% of R.O.	Ingress Protection 防护等级	IP65
Cable 导线	Ø4*400mm 4-conductor(Longer cable available) Ø4*400mm 4芯线		
R.O.=Rated Output/额定输出 F.S.=Full Scale/满量程			

• Subject to change without notice / 如有更改,不另行通知

Modbus RTU protocol

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

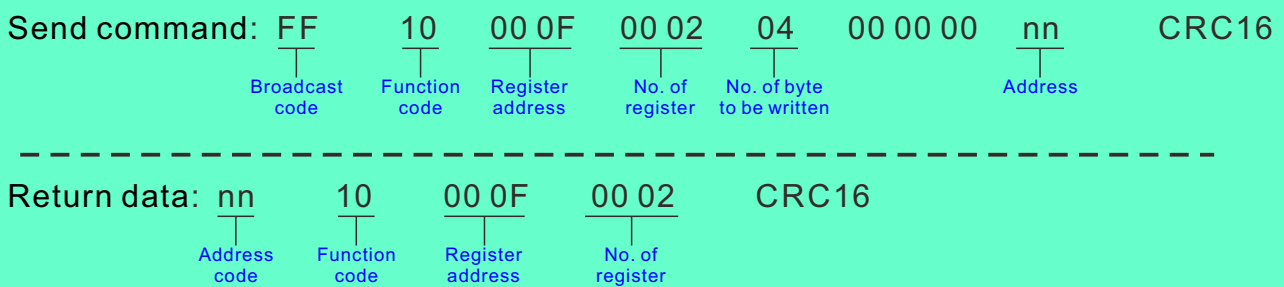
Function code

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

Register address and content

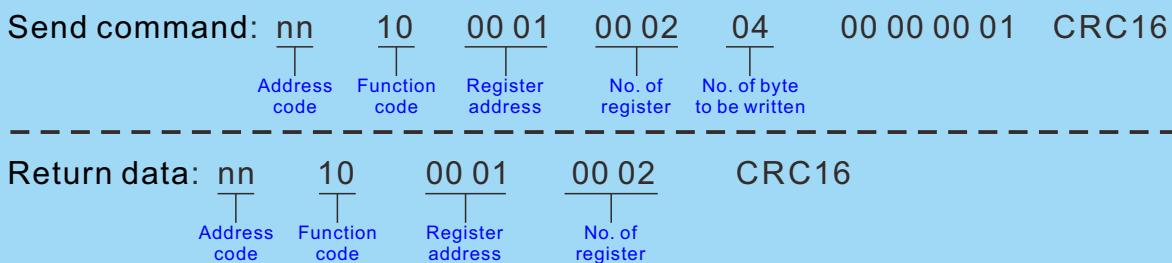
Register address	Corresponding content/function
0001	Weighing data
0001	Zero point calibration
0007	Zero resetting(Tare)
000F	Load cell address

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



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)



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

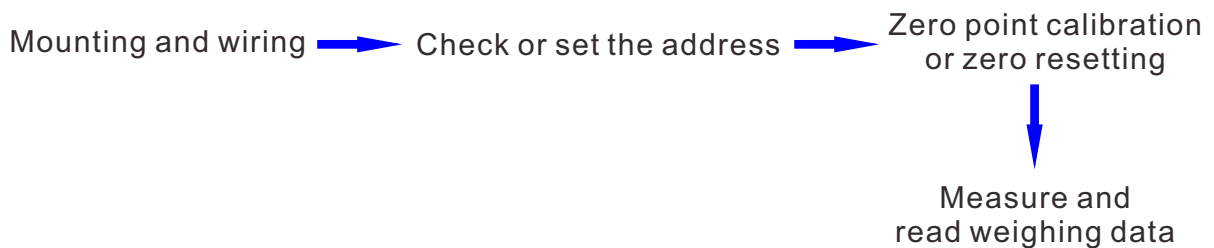
Return data: 01 03 04 11 30 03 E8 FF BE

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 baud rate will be set and the calibration will be done before shipment. If the customer wants to change the baud rate or recalibrate the sensor, we will send the instructions after confirming the parameters with the customer.