

# EM212

## Weight indicator and controller

EM212 is an industrial process control weight indicator, even don't collect to PLC, it can work as a standalone controller with the 7" color LCD and sufficient discrete I/O ports.

it can provide abundant humanized HMI interface, convenient for the special weighing applications as a controller.

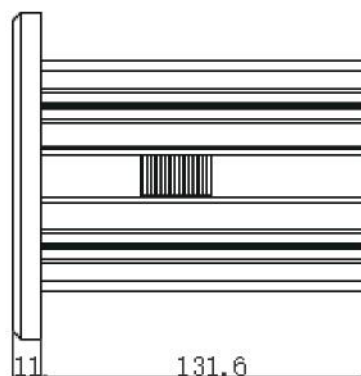
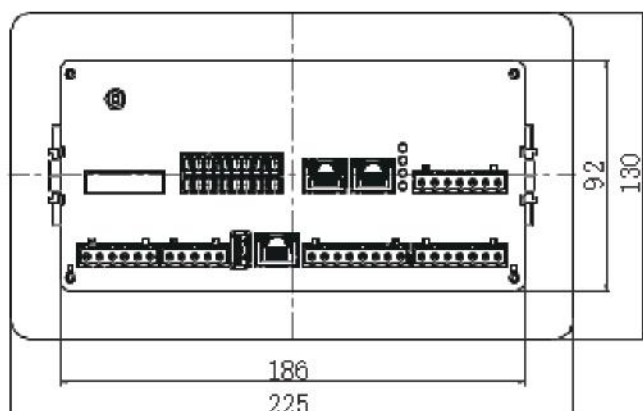
### Key features

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| <ul style="list-style-type: none"> <li> <b>Color screen display</b></li> <li> <b>Compact structure</b></li> <li> <b>Common Communication interface</b></li> <li> <b>PLC fieldbus interface</b></li> <li> <b>Typical application</b></li> </ul> | <ul style="list-style-type: none"> <li>• Certification accuracy: 6000e</li> <li>• 7" TFT full color touch screen</li> <li>• Panel structure convenient to embed in electrical cabinet</li> <li>• Standard isolated RS232 and isolated RS485; CAN, LAN, discrete I/O port, 4 inputs and 4 outputs. Optional analog output, 4-20mA/0-10V; discrete I/O port, 8 inputs and 8 outputs.</li> <li>• Profibus-DP, CC-Link, Profinet, EtherNet/IP, Modbus-RTU, Modbus-TCP</li> <li>• basic weighing, check weighing, filling/dosing, lose-in-weigh application programming.</li> </ul> |
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### Dimensions

Unit: mm



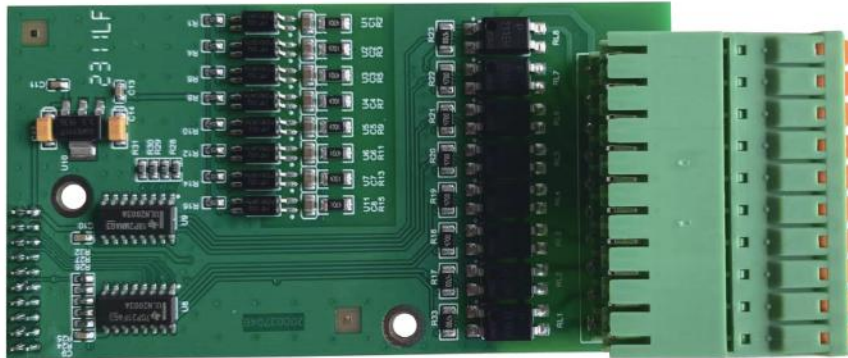
**Specifications**

Product model	EM212
AC Power	100~240VAC
Operating temperature	-20 ~ +60
Display screen	7 "TFT full color screen
Number of verification scale intervals (e)	6000
Number of scale intervals for indicator (d)	100000
Number of sensors	Up to 6 350 Ohm load cells (2 or 3mV/V)
AD sampling rate	1000Hz
Load cell Excitation	5VDC
Minimum sensitivity	0.5 $\mu$ V/e
Accuracy class	III
KeyPad	4 key control
Communication protocol	Command output, continuous output, Modbus RTU, Modbus TCP
Calibration method	Weight calibration; Weight-free calibration; Remote calibration
Scale	1
Capacity	1-500,000kg (default 60)
Increment size	0.0001/0.0002/0.0005
	0.001/0.002/0.005
	0.01/0.02/0.05 (default 0.01)
	0.1/0.2/0.5
	1/2/5
	10/20/50/100
Baud rate	1200, 2400, 4800, 9600 (default), 19200, 38400, 57600, 115200
DIO interface	4 inputs (optocoupler isolation) /4 outputs (relays, transistors)
Serial	1 way RS485 (isolation)
	1 way RS232 (isolation)
	1 way CAN (isolation)
Ethernet interface※	Port rate 10Mbps/100Mbps adaptive
analog quantity ※	1 way 4-20mA or 0-10v
DIO interface expansion board※	8 inputs (optocoupler isolation) /8 outputs (relays, transistors)
Communication interface board※	PROFINET、EtherNet/IP、Profibus-DP、CC-Link

Note: The list marked with ※ is optional, customers need to purchase separately.

选件板

## EM211 DIO board



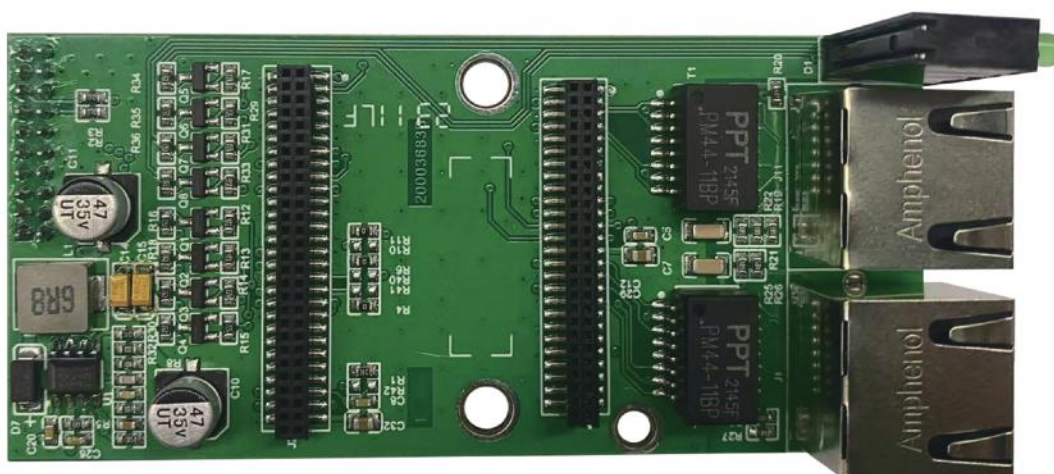
DIO board	Feature	Terminal mark	Terminal function description	Electrical performance		
Input/output	Extended input/output signal interface	COM	Extended input Com	Input point mode: DC Input voltage: 24VDC Input current: 5mA		
		IN5	Extended input 5			
		IN6	Extended input 6			
		IN7	Extended input 7			
		IN8	Extended input 8			
		IN9	Extended input 9			
		IN10	Extended input 10			
		IN11	Extended input 11			
		IN12	Extended input 12			
		COM	Extended input Com	Input point mode: DC Current: 2A/1point Voltage: 250VAC,30VDC Maximum load: 10W		
		COM	Extended output Com			
		OUT5	Extended output 5			Input point mode: transistor Current: 0.2A/1point Voltage: 30VDC Maximum load: 10W
		OUT6	Extended output 6			
		OUT7	Extended output 7			
		OUT8	Extended output 8			
		OUT9	Extended output 9			
		OUT10	Extended output 10			
		OUT11	Extended output 11			
OUT12	Extended output 12					
COM4	Extended output Com					

## EM211 Analog board



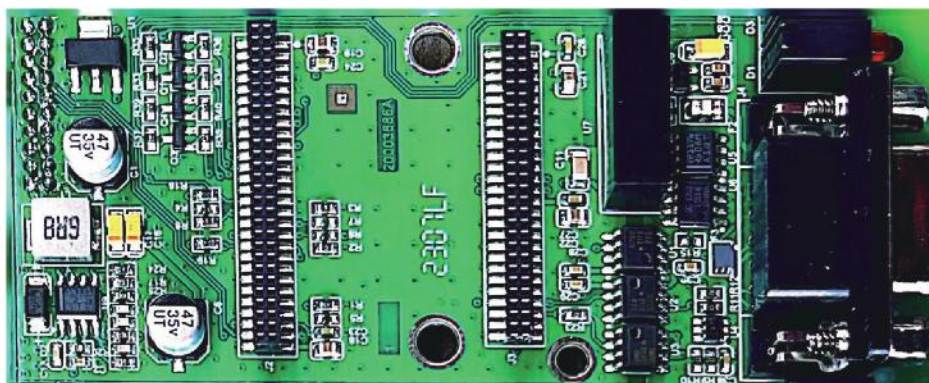
Analog board	Feature	Terminal mark	Terminal function description	Terminal function
Analog output	Voltage output	V0	Voltage output	Output range: 0-10V DC Load: $\geq 1k\Omega$
		VGND	Voltage output grounded	
	Current output	A0	Current output	Output range: 0-20mA DC Load: $\leq 500\Omega$
		AGND	Current output grounded	

## EM211 Profinet/EtherNet/IP board



Profinet board	Feature	Terminal mark	Terminal function description	Electrical performance
Network connection	Communication	J1/J11	Profinet protocol and Siemens PLC communication	Port rate: 10Mbps/100Mbps self-adaptation

## EM211 Profibus-DP



Profibus-DP	Feature	Terminal mark	Port function description	Electrical performance
RS232/485 output	Communication	J4	Profinet protocol and Siemens PLC communication	Port rate: 9.6K-12Mbps

## EM211 CC-Link board



CC-Link board	Terminal function description	Terminal mark	Feature	Terminal function
Communicate with PLC via CC-Link protocol.	Compatible with CC-Link networks, indicator is identified as a CC-Link remote device by the PLC.	DA	Communication wire A	Port rate: 156kbps-10Mbps
		DB	Communication wire B	
		DG	Digital grounded	
		SHIELD	Shielded grounded	
		FG/PE	Enclosure grounded	