

C510 Digital Indicator – Data Sheet



- 16 x 350Ω load cells
- AC and DC Power supply versions
- Ethernet and USB host and slave standard
- 10,000d @ 0.5 μV/d
- 8 set points (option)
- Analog module with 2 isolated outputs (option)
- High contrast LED display
- Programmable function key
- Totalizing, Hold, and Peak Hold
- MODBUS TCP, Legacy ASCII
- Embedded web server
- Diagnostics via Ethernet or USB slave

C500 Series is Rinstrum's latest panel mounted industrial process controller equipped with modern interfaces and increased accuracy. The C500 Series is the culmination of 25 years of innovative weighing controller design, bringing together the best of our R400 and 5000 Series.

The C510 has a high-contrast LED display and 5-button keypad. When panel mounted, the C510 uses a standard DIN cut out and can generally be used as a direct drop-in replacement for the Rinstrum 5000. Ideal applications for the C510 Series include truck weighing, process control and OEM.

Connectivity

USB Host and Slave, Ethernet and Modbus are standard -

- USB keyboard, printer and mass storage
- Multi-unit Ethernet network connection to a PC or HMI
- Connection to PLC using Modbus TCP, Analog output module
- Ethernet or USB slave ports provide a temporary connection to a laptop for configuration and diagnostics

Modules

- 8 isolated Input/Output (I/O)
- Analog output including two isolated I/O
- Isolated RS232 and RS485



Smart Weighing – C510

- Setup via the PC using Rinstrum C510 Viewer
- Quick and easy connect to C510 viewer through Ethernet or USB slave port

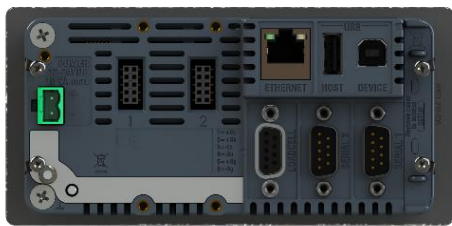
C510 Specifications

Specifications	
Resolution	Up to 10,000d, minimum of 0.5 μ V/d
Approvals	CE, C-tick 10,000d @ 0.5 μ V/d OIML R76
Zero Cancellation	+ / - 2.0mV/V
Span Adjustment	0.2 to 5.0 mV/V full scale
Excitation	5V for up to 16 x 350-ohm load cells 4-wire or 6-wire plus shield
A/D Type	24-bit Sigma Delta 8,388,608 internal counts
Nominal Environment	Temperature -10 to 40°C (-14 °F to 104 °F)
Operating Environment	Temperature -10°C to 60°C (14 °F to 140 °F)
Storage	Temperature: -40°C to 70°C (-40 °F to 158 °F)
Display	14.2mm tall (0.56") Green LEDs 6 x 7-segment digits
Setup and Calibration	Full digital calibration with visual prompting in plain messages
FIR Hardware DSP Filter	Selectable from 10 Hz – 100 Hz
Digital Filter	Averaging from 1 to 200 consecutive readings
Zero Range	Adjustable from 4% to 100% of full capacity
Correction	10-point linearity correction
Power	
DC Power	12-24VDC 10VA
AC Power (Accessory)	110-240VAC 50-60Hz ~0.6A Accessory M5104, includes 12VDC output
Connectivity	
Ports	USB Host: 1, supports keyboard, printers, mass storage
	USB Slave: 1, operates as USB serial port, Windows driver installs with C500 Viewer
	Ethernet: 1 x 10/100 Interface
	Serial Port 1: RS232 and RS422/RS485
	Serial Port 2: RS232
Accessories	
No. of Option Slots	2
8 I/O Module Set Point Card	8 x Isolated (>500V) digital I/O control points High Side FET Outputs will drive up to 400mA each High Side inputs (12-24V) Accessory M5301, Active HIGH
Analog Output Module Includes 2 I/O Combo Card	1 x Analog output Isolated (>500V) 4-20mA or 0-10V. 400Hz update at 1/65,000 resolution. 2 x digital I/O Accessory M5401
Serial Modules	Accessory M5201, RS232/RS232 Isolated Accessory M5203, RS485/RS485 Isolated Bi-directional with secondary transmit only

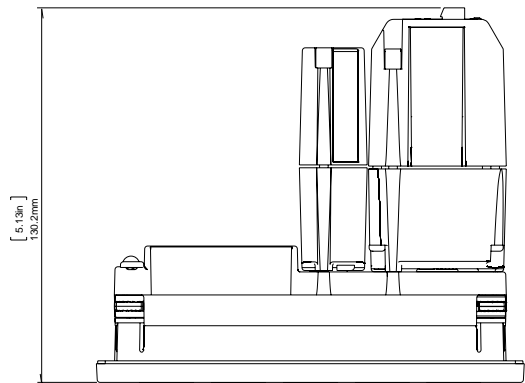
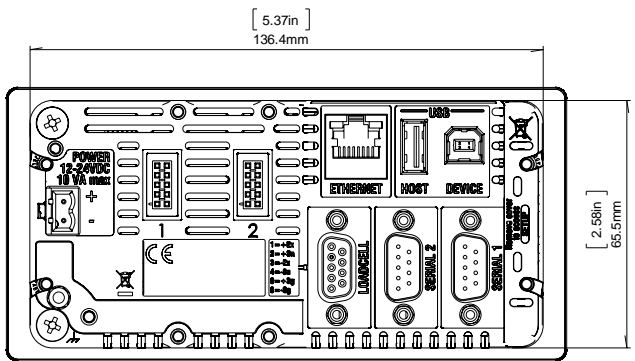
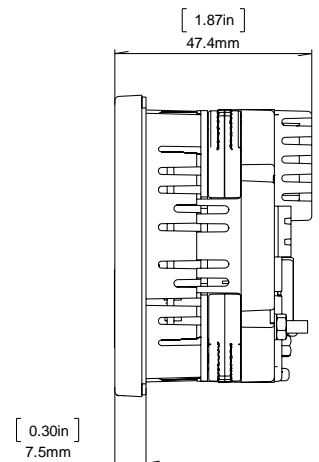
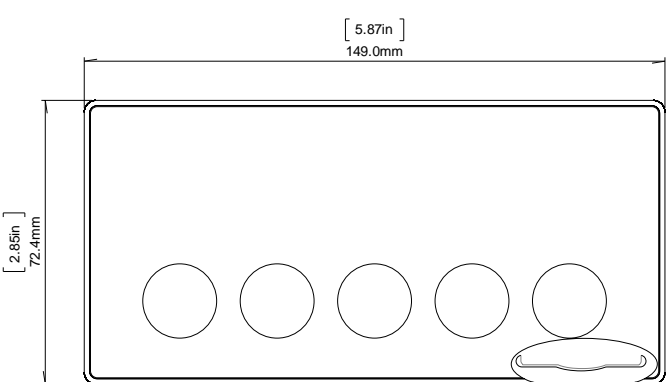
Features	
Set Points	8 selectable Active, Motion, Zero, Error, Net
Annunciators	lb, kg, g, t, I/O 1-8, Range 1/2, COZ, Net Motion indicated by hiding units Hold indicated by flashing units
Keys	5 keys Zero, Tare, Select, Print, function
Operating Modes	Single Range, Dual Range and Dual Interval
Clock	Battery Backed Clock Calendar
Alibi Mode	Standard
Change Log	Standard
Data Storage (DSD)	Standard, built in
Comms Protocol	5000 legacy via serial, USB, TCP and UDP, Modbus, legacy ASCII & TCP/IP
Mechanical	
Case Size	149mm W x 72.4mm H x 47.4mm D 5.87" W x 2.85" H x 1.87" D
Panel Cut Out	136.4mm W x 65.5mm H 5.37" W x 2.58" H
Case Front	PC & TPE
Case Rear	ABS Flame Retardant, UL94V0
Packing Weights	~0.57kg
Mounting	Panel & Desk
Physical Seal	Wire seal or Destructible label for setup key Destructible label for Load Cell

Specifications may change at any time without notice

C510



C510



With AC Module and Analogue Module fitted