

CB-2 Concrete Batch Controller Multi-Scale Automated Batching System



STANDARD FEATURES

- One aggregate and one cement scale
- Standard manual override controls
- Batch tickets with configurable field printing
- 1 megabyte database
- Material usage by day/week/month/year and inventory on-hand with reporting
- Automatic aeration control for cement silos and weigh hoppers
- Multiple freefall values per material
- Split batching for loads larger than plant capacity with pre-weighing next batch for maximum throughput
- Automatic dust collection outputs

SPECIFICATIONS

Materials:

Eight single speed aggregates
 Four dual speed cements
 Hot & cold metered or weighed water delivered in two additions
 Six metered admixtures configurable as bottle or direct feed injected with either water addition

1 Megabyte Database:

2200 mix designs
 750 customers
 200 trucks
 99 materials
 100 orders

State Modes:

CALTRAN
 NYS DOT
 MnDOT

Line Voltages:

115 or 230VAC

Frequency:

50 or 60 Hz

Power Consumption:

340 mA, maximum @ 115VAC (26W)
 240 mA @ 230VAC (26W)

Fusing:

115VAC: 2 x 400 mA TR5 subminiature fuses
 Wickman Time-Lag 19374 Series. UL Listed, CSA certified and approved
 230VAC/North American: 2 x 315 mA TR5 subminiature fuses Wickman Time-Lag 19372 Series. UL Listed, Semco and VD Approved

Full Scale Input Signal:

Up to 70 mV

Excitation Voltage:

10 ± 0.5VDC, 16 x 350Ω or 32 x 700Ω load cells per A/D card

Sense Amplifier:

Differential amplifier with 4 and 6 wire sensing

Analog Signal Input Range:

-10 mV to +70 mV

Analog Signal Sensitivity:

0.3 μV/graduation minimum @ 7.5 Hz
 1.0 μV/graduation typical @ 120 Hz
 4.0 μV/graduation typical @ 960 Hz

A/D Sample Rate:

7.5 to 960 Hz, software selectable (120 recommended)

Input Impedance:

>35 M typical

Internal Resolution:

8 million counts/8 million 23 bit

Weight Display Resolution:

9,999,999

Input Sensitivity:

10 nV per internal count

System Linearity:

±0.01% full scale

Zero Stability:

±150 nV/°C, maximum

Span Stability:

±3.5 ppm/°C, maximum

Calibration Method:

Software, contents stored in flash memory

Input Voltage Differential:

±800 mV referenced to earth ground

Input Overload:

Load cell signal lines ±10V continuous, ESD protected

RFI/EMI Protection:

Signal, excitation and sense lines protected

Analogue Output:

Option card: 16 bit resolution DAC
 Load resistance: 1.1 KΩ minimum
 Voltage output: 0–10VDC
 Current output: 0–20 mA
 External loop resistance: 840Ω maximum

Microcomputer:

Motorola ColdFire® MCF5307 main processor @ 90 MHz

Digital I/O:

Four I/O channels on CPU board; optional 24-channel I/O expansion boards available

Digital Filter:

Software selectable: 1–256, enhanced RATTLETRAP® hybrid digital filtering

Serial Ports:

Four ports on CPU board support up to 115,200 bps; optional dual-channel serial expansion boards available

Port 1: Full duplex RS-232

Port 2: RS-232 with CTS/RTS; PS/2

keyboard interface via DB-9 connector

Port 3: Full duplex RS-232, 20 mA output

Port 4: Full duplex RS-232, 2-wire RS-485, 20 mA output

Display:

4.6 in W x 3.4 in H (116 W x 86 mm H), 320 x 240 pixel VGA Liquid Crystal Display (LCD) module with adjustable contrast, 75 Hz scan rate 26,000 cd/m2 brightness

Keyboard:

27-key membrane panel, PS/2 port for external keyboard connection

Optional Features:

Four dual or eight single speed aggregates

Four dual or eight single speed cements

Weighed water with water reservoir

Four or eight auxiliary manual controls

Dual moisture probe interface (supports 4–20 mA or 0–10V probes)

Continuous batching with mixer controls for central mix block or precast plants

Warranty:

Two-year limited warranty

*Factory field installation required, minimum three days on site

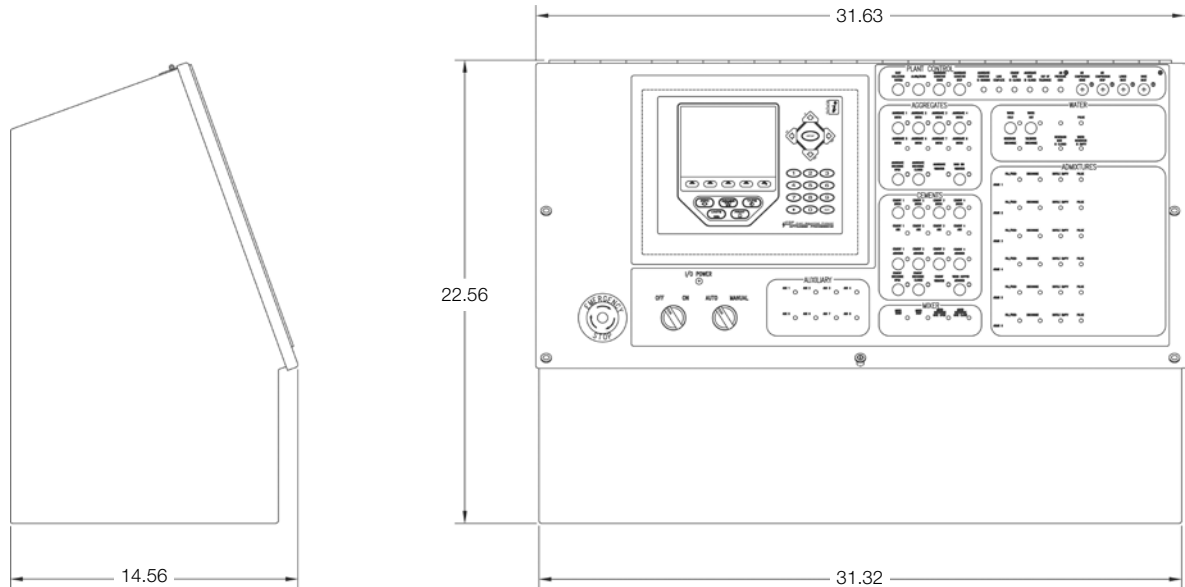
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PART NUMBER/PRICE

PART#	DESCRIPTION	EST. SHIP WEIGHT	PRICE
93501	CB-2 Concrete Batching Controller Metered Water/Four Cement/Eight Aggregate/Six Admix 115VAC	180 lb	Consult
93502	CB-2 Concrete Batching Controller Metered Water/Four Cement/Eight Aggregate/Six Admix 230VAC	180 lb	Consult
93503	CB-2 Concrete Batching Controller Weighed Water/Four Cement/Eight Aggregate/Six Admix 115VAC	180 lb	Consult
93504	CB-2 Concrete Batching Controller Weighed Water/Four Cement/Eight Aggregate/Six Admix 230VAC	180 lb	Consult
FLD-INST	Factory installation (required 40 hrs)		Consult

OPTIONS/ACCESSORIES

PART #	DESCRIPTION	PRICE
93505	Four dual or eight single speed aggregates (factory installed option)	Consult
93506	Four dual or eight single speed cements (factory installed option)	Consult
93507	Mixer logic and manual controls (factory installed option)	Consult
93508	Four auxiliary controls (factory installed option)	Consult
93509	Eight auxiliary controls (factory installed option)	Consult
93510	Water reservoir (factory installed option)	Consult
93511	Dual moisture probe Input (factory installed option)	Consult
110783	Load mix designs and test prior to shipping	N/C
113872	Phone support (4 hours)	Consult



CONCRETE BATCH CONTROLLERS