

# Concrete Batch Controllers

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*Multi-Scale Automated Batching System*

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# CB-3 Concrete Batch Controller

Multi-Scale Automated Batching System



(Note: Factory field installation required,  
minimum of three days on-site)

## Standard Features

- One aggregate and one cement scale, water scale is standard for P/N 177747
- Manual override controls
- Web server
- 128 GB data storage
- 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
- Automatic dust collection outputs
- Order-based batching
- Units: US standard or metric (SI) operation
- Aggregate conveyor control
- Loss-in-weight aggregate dispensing
- Three dual-speed or six single-speed aggregates
- Two dual-speed or four single-speed cements
- Weighed water with water reservoir (P/N 177747)
- Up to eight auxiliary manual controls
- Mixer controls for central mix block or precast plants
- Ethernet TCP/IP
- Up to six admixture
- Multi-user interface
- Dual moisture probe interface supports 4-20 mA

## Options

- Monitor
- Keyboard
- USB hub (4-port)
- USB Wi-Fi dongle
- Mouse
- Additional four admixture control system
- Portable batch plant system
- Control panel for remote batching
- Customized batch ticket printing

## Specifications

### Model:

B&R APC2100

### Processor Type:

Intel Atom® E3845

Quad core

### Data Storage Type:

Industrial CFast card

### Data Storage Capacity:

128 GB

### Interfaces:

Four USB

Two Ethernet TCP/IP

### Monitor Output:

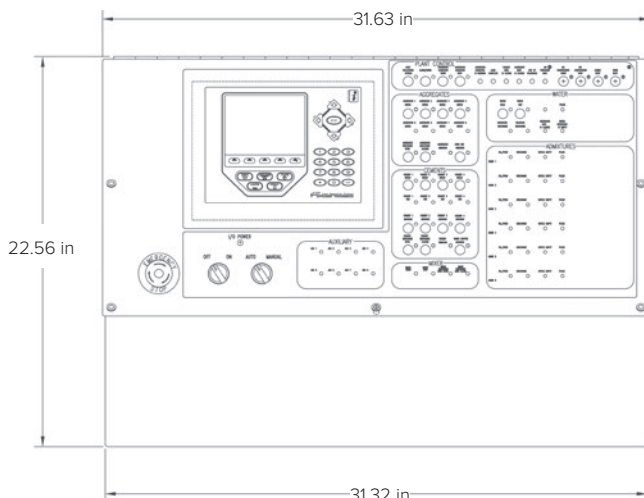
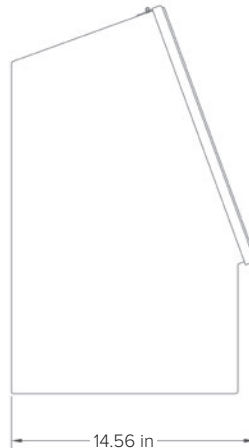
One SDL/DVI

### Operating System:

Linux Ubuntu

### Voltage:

24 VDC



## 920i® Specifications

### Power:

AC voltages: 100 to 240 VAC

Frequency: 50/60 Hz

DC voltages: 12 to 24 VDC

### Power Consumption:

AC: 25W (universal) or 65W (others)

DC: 25W for all models

### Excitation Voltage:

10 VDC (+/- 5 VDC)

16 × 350 ohm or 32 × 700 ohm load cells  
per A/D card

### Analog Signal Input Range:

-45 mV to +45 mV

### Analog Signal Sensitivity:

0.3  $\mu$ V/graduation minimum at 7.5 Hz

1.0  $\mu$ V/graduation recommended

### A/D Sample Rate:

7.5 to 960 Hz, software selectable

### Resolution:

Internal: 8,000,000 counts

Display: 1,000,000

### System Linearity:

± 0.01% full scale

### Digital I/O:

Six I/O channels on CPU board;

Optional 24-channel I/O expansion boards

### Communication Ports:

Four ports on CPU board support up to 115,200bps

Port 1: Full duplex RS-232

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

interface or USB type A and B connectors

Port 3: Full duplex RS-232, 20mA

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

Optional dual-channel serial expansion boards

Channel A: RS-232, RS-485, 20 mA

Channel B: RS-232, 20 mA

### Display:

(W × H)

4.6 × 3.4 in (116 × 86 mm)

320 × 240 pixel

LCD module with adjustable contrast

Transmissive display

Transflective display (optional)

### Keys/Buttons:

27-key membrane panel, tactile feel, PS/2

or USB port for external keyboard connection

### Temperature Range:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)

Operating: 14 °F to 122 °F (-10 °C to 50 °C)

### Rating/Material:

NEMA Type 4X, Type 12, IP66

Stainless steel

### Weight:

Universal enclosure: 9.5 lb (4.3 kg)

Wall mount enclosure: 23.0 lb (10.4 kg)

Panel mount enclosure: 8.5 lb (3.9 kg)

Deep universal: 11 lb (5.0 kg)

### Warranty:

Two-year limited

### EMC Immunity:

10 V/m

### Approvals:

NTEP CC 01-088, Class III/IIIL 10,000d

Measurement Canada AM-5426,

Class III/IIIL HD 10,000d

OIML R76/2006-A-GB1-19.08

EU Test Certificate TC11584

UL/cUL Listed (Universal, Deep Universal  
and Wall Mount)

UL/cUL Recognized (Panel Mount)

UL/cUL Listed 508A (custom Wall Mount)

CE Marked

# CB-3 Concrete Batch Controller

Multi-Scale Automated Batching System with PC Program

## Part Number/Price

Part#	Description	Est. Weight	Price
177746 *	CB-3 concrete batching controller, metered water, PC included	180 lb	\$26,750.00
177747 *	CB-3 concrete batching controller, weighed water, PC included	180 lb	\$27,250.00
FLD-INSTALL	Factory field installation required (minimum 3 days on site)	—	\$1,395.00 per day
FLD-INSTALLSA	Factory field installation, Saturday	—	\$2,095.00
FLD-INSTALLSU	Factory field installation, Sunday	—	\$2,790.00

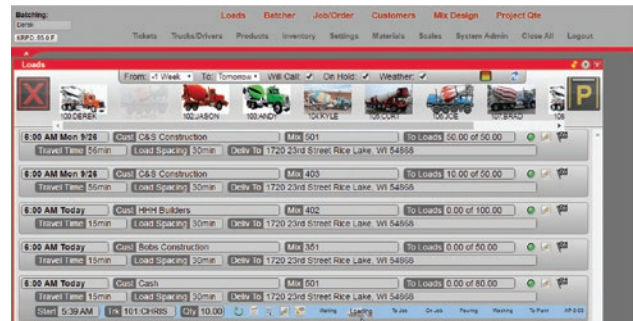
## Options/Accessories

Part #	Description	Price
175877	Upgrade kit CB-2 to CB-3, PC included	\$12,500.00
179209	Accessory kit (includes monitor, keyboard, USB hub and mouse)	\$450.00
179210	Monitor, Acer	\$290.00
179211	Keyboard, Microsoft	\$47.50
179212	Mouse, Microsoft	\$44.50
185667	USB Hub	\$20.00
186277	Wireless USB adapter WI-FI	\$80.00
196700	4 Additional Admin controller	Consult

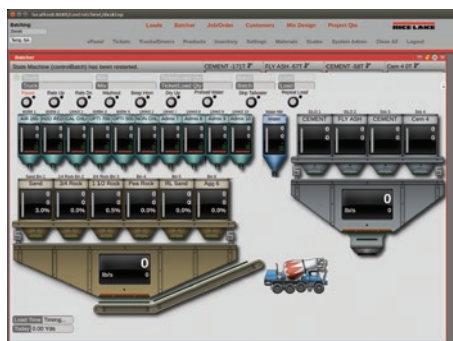
\* Completed questionnaire required prior to ordering this system. Questionnaire available at [www.ricelake.com/resources/product-questionnaires](http://www.ricelake.com/resources/product-questionnaires)



CB-3 Ticket Output



CB-3 Truck Monitoring Screen



CB-3 Batcher Screen

CONCRETE BATCH  
CONTROLLERS

# 1280<sup>®</sup> FlexWeigh Systems Concrete Batcher

NEW



## Standard Features

- Powered by 1280 Enterprise Series indicator
- Large 12-in color touchscreen display
- Remote batching through web server integration
- Front panel control switches and emergency stop
- Automatic or manual batching modes
- Decumulative plant setup
- Configurable from two to five scales (one to two cement scales, and one to three material bins)
- Up to four admixes (bottled or direct)
- Manual entry of moisture compensation percentage
- Metered water controlled by onboard DIO
- Import/export databases via USB, Revolution<sup>®</sup> or Interchange software
- Configurable batch transaction ticket
- Storage for 1,000 transactions, 1,000 mix designs, 500 customers
- Available with English or Spanish operation and in imperial or metric measurements

## Options

- Desktop stand
- Sun visor

## Specifications

### Power:

100 to 240 VAC; 50/60 Hz

### Excitation Voltage:

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

### Analog Signal Input Range:

-60 mV to 60 mV

### Analog Signal Sensitivity:

0.3 µV/graduation minimum at 7.5 to 120 Hz  
1.0 µV/graduation recommended

### A/D Sample Rate:

7.5 to 960 Hz, software selectable

### Resolution:

Internal: 8,000,000 counts  
Display: 1,000,000

### System Linearity:

± 0.01% full scale

### Communication Ports:

Port 1 & 2: Full duplex RS-232 with CTS/RTS, RS-422/485  
Baud Rate: 1200 to 115200  
Port 3: USB 2.0 Device (Micro)  
USB Host: (2) Type A Connectors max 500 mA  
Ethernet: Wired 10/100 Auto-MDX  
Ethernet: Wireless 802.11 b/g/n 2.4GHz

### Onboard:

Selectable filters: Three stage, adaptive or damping  
Embedded Linux<sup>®</sup> OS  
8 GB eMMC (system use)  
1 GB DDR3 RAM  
460 MB onboard database (SQLite) storage  
Up to 32 GB micro SD card

### Display:

Twelve-inch, 1280 × 800 pixel,  
1,500 NIT

### Temperature Range:

Certified: 14 °F to 104 °F (-10 °C to 40 °C)  
Operating: -4 °F to 131 °F (-20 °C to 55 °C)

### Rating/Material:

Painted mild steel enclosure  
NEMA Type 12; NEMA Type 4; IP66

### Dimensions:

20 × 20 × 8 in

### Warranty:

Two-year limited

### EMC Immunity:

EN 50082 Part 2 IEC  
EN 61000-4-2, 3, 4, 5, 6, 8, 11

## Part Number/Price

Part #	Description	Price
208907	Main system	\$14,500.00
212392	Sun visor	\$425.00
212234	Desktop kiosk stand	\$150.00

### Front Panel Switches

Auto/Manual

E-Stop

Conveyor Start/Run\*

Bin 1\*

Bin 2\*

Bin 3\*

Cement 1\*

Cement 2\*

Water\*

Admix 1\*

Admix 2\*

Admix 3\*

Admix 4\*

\* Available in Manual Mode

### Inputs

Admixture 1 Bottle Empty

Admixture 1 Pulse

Admixture 2 Bottle Empty

Admixture 2 Pulse

Admixture 3 Bottle Empty

Admixture 3 Pulse

Admixture 4 Bottle Empty

Admixture 4 Pulse

Manual Mode

Air Pressure OK

E-Stop

Water Meter Pulse

Conveyor Running

### Outputs

Conveyor Start/Run

Alarm/Horn

Bin 3 Vibrator

Bin 3 Feed

Admixture 1 Fill/Feed

Admixture 1 Discharge

Admixture 2 Fill/Feed

Admixture 2 Discharge

Admixture 3 Fill/Feed

Admixture 3 Discharge

Admixture 4 Fill/Feed

Admixture 4 Discharge

Bin 1 Feed

Bin 2 Feed

Cement 1 Feed

Cement 2 Feed

Water Feed

Bin 1 Vibrator

Bin 2 Vibrator

Cement 1 Air

Cement 2 Air

Dust Collector 1

Dust Collector 2

CONCRETE BATCH  
CONTROLLERS