

Concrete Batch Controllers

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Multi-Scale Automated Batching System

1280® FlexWeigh Systems
Concrete Batcher 320

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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:

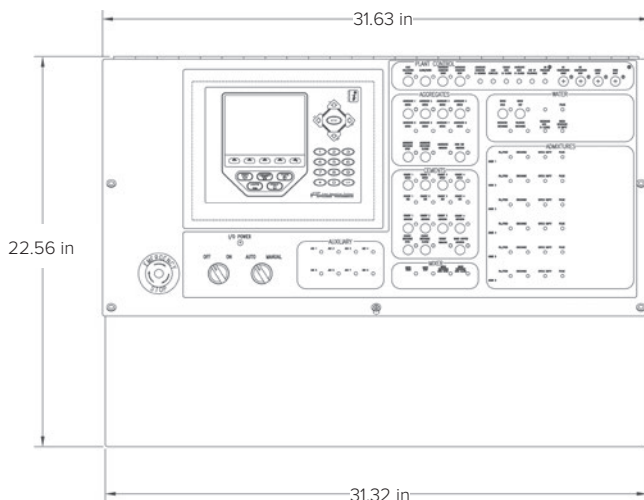
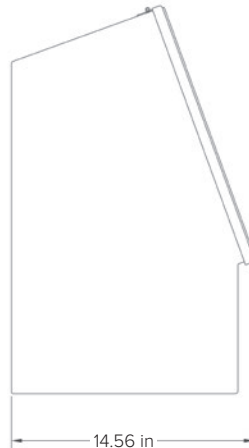
One SDL/DVI

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 μ V/graduation minimum at 7.5 Hz
1.0 μ 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 | \$29,995.00 |
| 177747 * | CB-3 concrete batching controller, weighed water, PC included | 180 lb | \$30,495.00 |
| 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 |

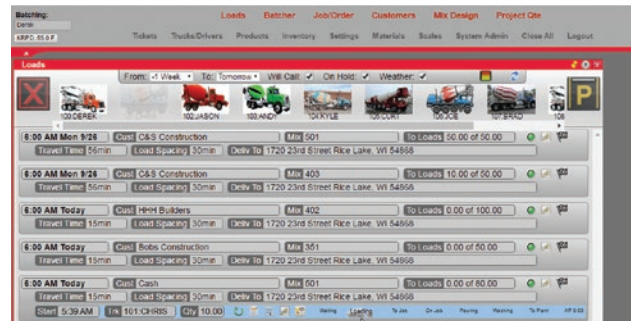
Options/Accessories

| Part # | Description | Price |
|--------|---|-------------|
| 175877 | Upgrade kit CB-2 to CB-3, PC included | \$13,750.00 |
| 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 |

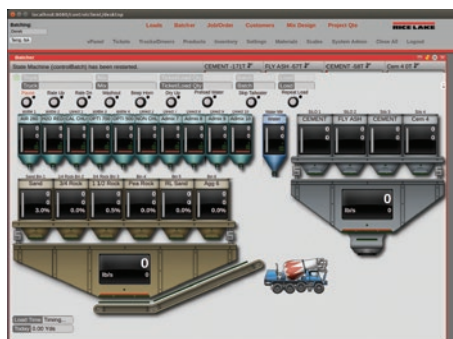
* Completed questionnaire required prior to ordering this system. Questionnaire available at www.ricelake.com/resources/product-questionnaires



CB-3 Ticket Output



CB-3 Truck Monitoring Screen



CB-3 Batcher Screen

CONCRETE BATCH
CONTROLLERS

1280® 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® 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® 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 x 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 x 20 x 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 | \$15,950.00 |
| 212392 | Sun visor | \$500.00 |
| 212234 | Desktop kiosk stand | \$450.00 |

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