720i™

PROGRAMMABLE INDICATOR/CONTROLLER

RICE LAKE
W E I G H I N G   S Y S T E M S

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720i–Powerful Functionality

Simplified Intelligence

The 720i indicator/controller proves its ability to control more processes, more equipment and more information than other basic models. Automate entire systems by commanding batch formulation, simplify ticketing for vehicle scales, or customize to prompt, capture and print your process data. Capture and store weight data, link more peripheral equipment and do it all with ease.

The 720i design presents an operator keypad in either universal or panel-mount enclosures. Programmable softkeys and operator prompts offer more functionality and control for busy industrial settings.

Utilize the standard configurable batch engine of the 720i Batching version or explore the programming capabilities of the 720i Advanced Truck version. Both versions feature local remote capability, allowing multiple indicators to simultaneously display the same data for effortless tracking. Whether used for truck scale operations, data collection, batching or networking, this versatile indicator/controller is an intelligent solution.

Designed for Your Application

Choose between two 720i versions to find the best fit for your application. The 720i Batching version is designed specifically for batch control while the 720i Advanced Truck version excels with its advanced process control, increased data storage and reporting capabilities. The Advanced Truck version is ideally suited for a wide range of applications, from truck and vehicle scale environments to industrial automation. Both versions are available in either universal or panel mount enclosures.

Batching
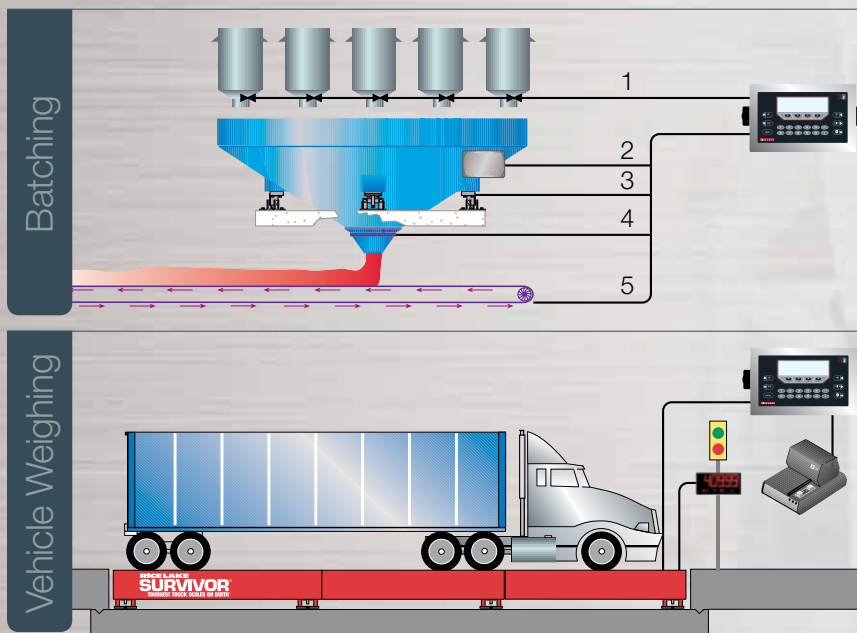
This sequence is one example of a simple process programmed using the 720i's standard batch engine. (1) At the touch of a button, gates release product into a large hopper. (2) The product is then measured using weight data collected from load cells. (3) Next, the 720i signals a motor to mix the hopper contents for a given length of time. (4) Lastly, another gate is engaged to discharge a certain amount of product based on weight, (5) while a conveyor system is simultaneously activated.

Vehicle Weighing

Connect peripherals such as PCs, printers, remote displays and stop/go lights with the 720i Advanced Truck version. Weight is easily displayed at the scale and in an office simultaneously using local/remote capability. For increased data storage and reporting capabilities, simply enter the 720i's Advanced Truck Mode. These features (and more) make the 720i an outstanding value for any truck and vehicle scale application.

Upgraded CPU Design

The 720i has a robust CPU board design for reliable signal integrity and longer life.
- Increased transient voltage protection
- Improved signal integrity

INTUITIVE, EASY-TO-USE
LOCAL DISPLAY
Character sizes are ¾ inch and backlit
for easy readability at a distance, in bright
sunlight and dim light.

FOUR SOFT KEYS
Soft keys allow the operator to easily
create new keys and understand functions
and selections.

Flexible Features

The 720i includes powerful onboard connectivity as well as expandability for a wide range of applications.
- Two full duplex serial ports
- Eight digital I/O
- 20 auxiliary print formats
- Capture Peak Hold and display rate of change
- Header for USB, Ethernet or fiber-optic interface card
- One option slot to use with additional networking or option cards

CONFIGURABLE BATCH ENGINE
Allows you to design your own
multistep procedure to automatically
run from beginning to end.

ZERO/GROSSNET/MENU/TARE/
UNITS/PRINT KEYS
Most common interface keys located on
the front panel for easy access.

Powerful Process Control

Choose the 720i Advanced Truck version for extended programmability.
- Simple processes can be programmed with "step, condition, action" philosophy for sequences and prompts
- Evaluates multiple steps simultaneously
- Create, edit and manage databases

NEMA TYPE 4X/IP66
RATED ENCLOSURE
Heavy-duty, stainless steel
embossed enclosure is ideally suited
for the toughest industrial environments.

LATCHED I/O CONTROL
The 720i combines
the benefits of a weight-based
control system architecture
for batching processes.

Built-in Batching

Choose the 720i Batching version for built-in batch control functionality.
- Design your own multi-step procedure to run automatically from beginning to end
- Uses the same powerful batch engine as Rice Lake's advanced indicators
- 32 configurable batch steps or free-running setpoints
- Batch routine can be started automatically or manually
- More than 20 types of setpoints can be triggered on conditions like weight, time, count or status
- Setpoint activation is based on being higher, lower, inside or outside a bandwidth
- Preact tuning and auto jogging ensure accuracy during changes in product flow

Truck and Vehicle Scale Applications

The 720i Truck in/out and Advanced Truck versions come with several unique features designed specifically for truck and vehicle scale environments.

720i Truck in/out:
- Stores 1,000 weigh-in weights and calculates gross, tare and net weights on weigh-out
- Allows keyed and stored tare weights for outbound vehicles

720i Advanced Truck:
- Attach peripheral equipment such as PCs, printers, stop/go lights, remote displays and more
- Install one 720i in the office and one at the scale to display the same weight data with local/remote capability
- Advanced Truck Mode gives more data storage and reporting capabilities: Up to 99 unique customer, material or source files, and more than 1,400 transaction files.
- Print summary reports by material, customer and source by date range, daily or shift
- Multi-range, multi-interval allow for incremental flexibility
- Alibi tracking retrieves data and can reprint tickets from scale history

720i
PROGRAMMABLE INDICATOR/CONTROLLER

Standard Features

- LCD display size:
  Panel mount 3.8 in x 1.2 in
  Universal 5.3 in x 1.5 in
- Four soft keys
- Truck in/out, 1,000-ID memory
- Advanced Truck Mode 1400+ transaction files (720i Advanced Truck)
- Eight digital I/O (expandable)
- One option slot for pluggable options
- 20 Auxiliary print formats
- Time and date
- Audit trail tracking and alibi storage
- Peak hold
- Rate of change

- Multi-range/interval
- Local/remote

720i Advanced Truck
- Evaluates multiple steps simultaneously
- Data storage onboard, user-defined

720i Batching
- (32) Configurable, sequenced batch steps or free-running setpoints

Functionality:
- Two full duplex serial ports
- Header for fiber optic, Ethernet or USB

Options/Accessories

- Digital I/O, 24 channel
- Dual-channel serial, 20mA, RS-232, RS-485
- Analog output selectable (0-10V, 0-20 mA)
- USB port (PC connection only-replaces serial port)
- DC/DC power supply, 12-24 VDC
- Fiber optic communication board

Communication protocol cards
- Ethernet TCP/IP
- Wireless LAN card (Wi-Fi)
- Allen-Bradley® Remote I/O interface
- Profibus® DP interface
- DeviceNet™ interface
- EtherNet/IP interface

Specifications

Display Viewable area:	Panel mount 3.8 in x 1.2 in (96 x 30 mm); Universal 5.3 in x 1.5 in (133 x 39 mm) 240 x 64 pixel, transflective LCD display with adjustable contrast
Excitation Voltage:	10 VDC, 16 x 350 Ω or 32 x 700 Ω load cells
A/D Sample Rate:	7.5 to 960 Hz, software selectable
Resolution:	Internal resolution: 8,000,000 counts 23 bit Weight display resolution: 9,999,999
Serial Ports:	Two ports on CPU board support up to 115,200 bps
Digital I/O:	Eight channels on CPU board
Rating/Material:	NEMA Type 4X/IP66, stainless steel
Operating Temperature:	Legal: 14°F to 104°F (-10°C to +40°C) Industrial: 14°F to 122°F (-10°C to +50°C)

Approvals
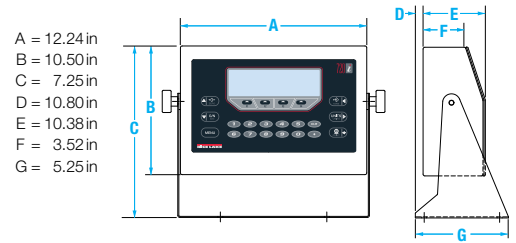
Enclosure Options

UNIVERSAL MOUNT

Model Specific Features
- 360° mounting configuration
- NEMA TYPE 4X enclosure IP66

A = 12.24 in
B = 10.50 in
C = 7.25 in
D = 10.80 in
E = 10.38 in
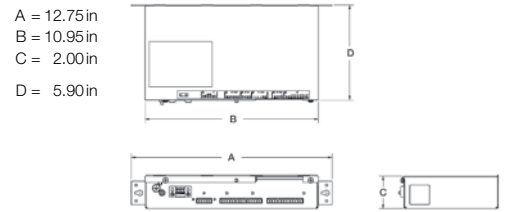F = 3.52 in
G = 5.25 in

PANEL MOUNT

Model-Specific Features
- Optimizes panel space
- Display separate from Controller box

A = 7.36 in
B = 6.12 in
C = 1.58 in
D = 3.88 in
E = 2.45 in
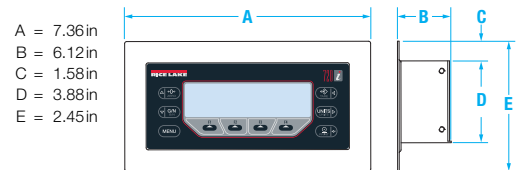
PANEL MOUNT CONTROLLER BOX

Model Specific Features
- Locate up to 1,000 feet from display
- Machine screw or clip in din rail mount

A = 12.75 in
B = 10.95 in
C = 2.00 in
D = 5.90 in

RICE LAKE
WEIGHING SYSTEMS