RICE LAKE®
WEIGHING SYSTEMS

720™*i*

PROGRAMMABLE HMI
INDICATOR/CONTROLLER

For every action, there's 720i

Intelligence with Simplicity

The 720i indicator/controller breaks away from Rice Lake's pack of basic models with its ability to control more processes, more equipment and more information. Automate entire systems by commanding batch formulation, inventory management and traceability. Capture and store weight data, link more peripheral equipment and do it all with incredible ease.
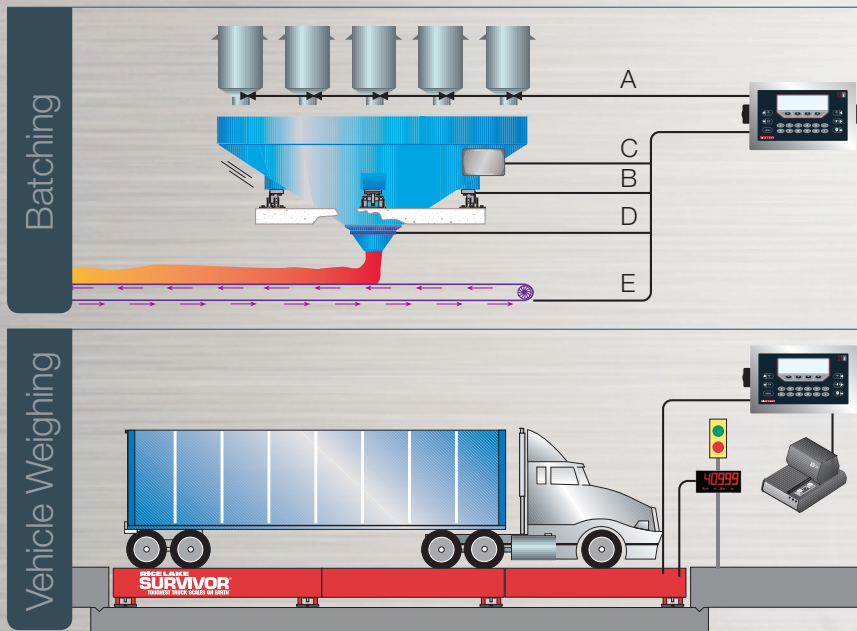
The attractive 720i design presents a complete operator keypad in either universal or panel-mount enclosures. Programmable softkeys and operator prompts offer more functionality and control for busy industrial settings.

Programming is easier than ever using either the standard configurable batch engine or the 720i's exclusive ProAction™ software. Local remote capability allows multiple indicators to simultaneously display the same data. Truck scale operations, data collection, batching or networking—this multifaceted HMI can handle them all.

Two Versions Designed for Your Application

Choose between two 720i versions for your application's best fit. The 720i batching version is designed specifically for batch control while the 720i PCE version excels in sophisticated installations with advanced process control capabilities, increased data storage and superior reporting capabilities. This 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

The example here displays a simple sequential process that could be programmed using 720i's standard batch engine. At the touch of a button gates (A) release product into a large hopper. The product is then measured using weight data collected from load cells (B). Next, the 720i signals a motor (C) to mix the hopper contents for a given length of time. Lastly, another gate (D) is engaged to discharge a certain amount of product based on weight (B), while a conveyor system is simultaneously activated (E)

Vehicle Weighing

Unique truck and vehicle scale features set the 720i apart from the competition. Connect peripherals such as PCs, printers, remote displays and stop/go lights. Use the local/remote capability to display weight data at the scale and in the office. Enter the 720i's Advanced Truck Mode (ATM) for increased data storage and reporting capabilities. All of these features (and more) make the 720i an outstanding value for any truck and vehicle scale application.

ProAction

The Power to do More

To make full use of the 720i's functionality and power, the ProAction programming tool can be installed. This software speaks to your 720i like no other program can. ProAction takes the standard batch engine one step further by removing the constraints of sequential control, adding data collection, and giving your 720i the flexibility to perform more operations simultaneously. Create programs to prompt your operator through a process, store formulas, or even collect weight data and generate reports.

Take your process to the next level and customize your indicator to its highest potential. ProAction is ready. This incredible programming function is available for use with every 720i.

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

FOUR (4) SOFT KEYS
Soft keys allow the operator to easily create new keys and understand functions and selections.

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

PROACTION™
The fastest, most powerful single scale controller available with an onboard process control engine and database storage.

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

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

DETERMINISTIC I/O CONTROL
The 720i essentially combines all the features and benefits of weightbased control system architecture with that of a typical PLC.

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 straightforward batch engine as Rice Lake's advanced 820i® and 920i® indicators
- 32 configurable batch steps or free-running setpoints

Powerful Process Control

Choose the standard 720i PCE version for extended programmability.
- Compatible with Rice Lake's ProAction PCEE (process control engine editor) and DBE (database editor) software
- Simple "step, condition, action" philosophy to program custom functions
- Evaluates multiple steps simultaneously
- Create, edit and manage databases

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
- PC style PS/2 keyboard port
- Header for USB, Ethernet or fiber-optic interface card
- One option slot to use with additional networking or option cards

Truck & Vehicle Scale Applications

Both versions of the 720i come with several unique features designed specifically for truck and vehicle scale environments.
- 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 (720i PCE) gives more data storage and reporting capabilities: Up to 99 unique customer, material or source files and more than 1400 transaction files
- Multi-range, multi-interval allow for incremental flexibility
- Alibi tracking retrieves data and can reprint tickets from scale history

720i

PROGRAMMABLE HMI 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 PCE)
- Digital I/O (expandable) (8)
- One option slot for pluggable options
- Auxiliary print formats (20)
- Time and date
- Audit trail tracking and Alibi storage
- Peak hold
- Rate of change
- Multi-range/interval
- Local/remote

720i PCE
- ProAction process control engine - define conditions and actions
- Evaluates multiple steps simultaneously
- Data storage onboard, user-defined

720i Batch
- (32) Configurable batch steps or free running setpoints

Functionality:
- Two full duplex serial ports
- One remote keyboard port
- Slot for option card
- Separate slot 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 converter kit, 9-36 VDC nominal
- Fiber optic communication board
- Remote Keyboard
- Filter PreVent™ vent kit

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

RS-232 RS-485

20 mA current loop

DeviceNet™

EtherNet/IP

PROFI BUS®

Ethernet connectivity

Specifications

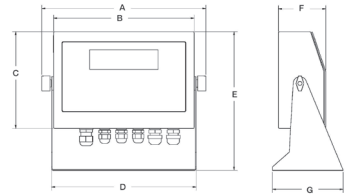|	
Display Viewable area:	Panel mount 3.8 in x 1.2 in (96 x 30 mm); Universal 5.3 in x 1.5 in (133 x 39 mm) 240 x 64 pixel, back lit VGA Liquid Crystal Display (LCD) module with adjustable contrast
Excitation Voltage:	10 VDC, 16 x 350 Ω load cells
A/D Sample Rate:	7.5 to 960 Hz, software selectable
Resolution:	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
Circuit Protection:	RFI, EMI, ESD protection
Rating/Material:	NEMA 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 4X enclosure IP66

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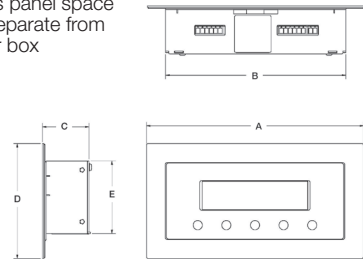B = 10.50"
C = 7.25"
D = 10.80"
E = 10.38"
F = 3.52"
G = 5.25"

PANEL MOUNT

Model-Specific Features
- Optimizes panel space
- Display separate from Controller box
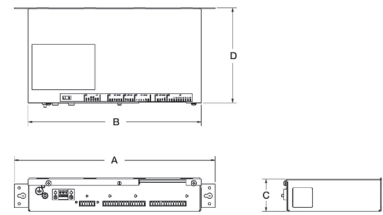
A = 7.36"
B = 6.12"
C = 1.58"
D = 3.88"
E = 2.45"

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"
B = 10.95"
C = 2.00"
D = 5.90"