720i™

PROGRAMMABLE HMI INDICATOR/ CONTROLLER

Intelligence Made Easy

The 720i is the first in a line of powerful and intelligent HMI devices from Rice Lake. This weight indicator breaks away from our pack of basic models with its ability to control more processes, more equipment, and more information than ever before.

Automate entire systems by dictating batch formulation, inventory management, or 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 showcased in either universal or panel-mount enclosure styles. Programmable soft keys and operator prompts offer more control for busy industrial settings. Programming is easier than ever using either the standard configurable batch engine or 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.

The 720i comes standard with two full duplex serial ports, eight digital I/O, 20 auxilliary print formats and a complete set of popular features. Plus we've included one option slot to use with a selection of networking and option cards. Take your 720i to the next level and create an indicator as unique as your process.

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 multi-step 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.

Improving the Process

Several unique features set the 720i apart in truck and vehicle scale applications.

- More peripheral equipment, PCs, printers, stop/go lights, remote displays and more
- Local/remote capability—put one 720i in the office and one at the scale to display the same weight data
- Value swapping—accurately interpret the tare value to report gross-net without negative numbers
- Multi-range and multi-interval allow for more incremental flexibility
- Alibi Tracking for reprinting tickets from scale history
- And NEW Advanced Truck Mode (ATM):

With ATM, experience even more data storage and reporting capabilities. Ramped up memory capacity stores up to 99 unique customer, material or source files and more than 1400 transaction files.

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

Zero/GrossNet Menu/Tare/Units Print Keys
Most common interface keys located on the front panel for easy access.

Deterministic I/O Control
The 720i essentially combines all the features and benefits of weight-based control system architecture with that of a typical PLC.

With ATM the 720i can also provide a range of useful reports, whether by shift, by customer, material, or summary of a day or an entire date range—to name a few.

Simple, start to finish

Using the same straightforward configurable batch engine as Rice Lake's other programmable indicators, the 720i allows you to design your own multi-step procedure to run automatically from beginning to end. Up to 32 setpoints are available for driving the actions your system requires. Once configured, the process can be started, paused, or stopped with softkeys on the display, or signaled from other sources like serial commands or digital inputs. Each action can be named and displayed as it's performed. Choose to run your process manually, a number of times through, or continuously.

Figure 1
The example below 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).
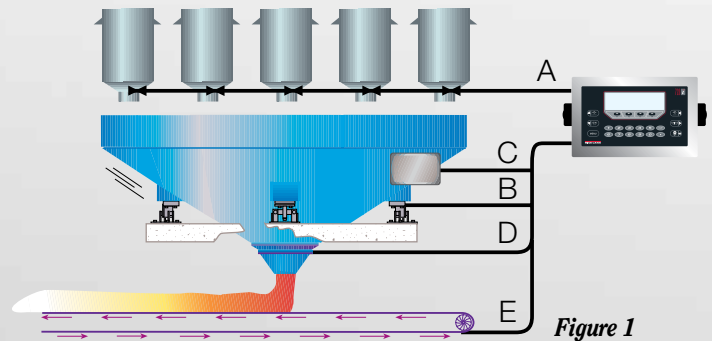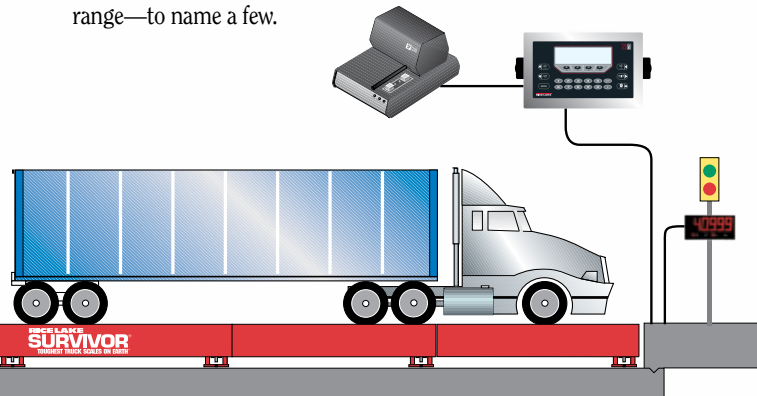
Figure 1

ProAct*i*on
The Power to do More

To make full use of 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.

Looking for even more programming power and flexibility?

Ask your Rice Lake distributor about the incredibly flexible, infinitely expandable, high-speed programmable 920i® HMI indicator/controller.

720 *i* PROGRAMMABLE HMI INDICATOR/CONTROLLER

Standard Features

- LCD display size:
  Panel mount 3.8" x 1.2"
  Universal 5.3" x 1.5"
- 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
- Allen-Bradley® Remote I/O interface
- Profibus® DP interface
- DeviceNet™ interface
- Ethernet IP interface

RS-232 RS-485

20mA current loop

DeviceNet™

ENCOMPASS
ROCKWELL AUTOMATION
AMERICAS PARTNER

PROFI BUS®

Ethernet connectivity

Specifications

Display Viewable area:	Panel mount 3.8" x 1.2" (96 x 30 mm); Universal 5.3" x 1.5" (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 350Ω 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

NTEP   OIML   Measurement Canada Approved   TÜV PRODUCT SERVICE   CE   c UL us LISTED *   c UL us **

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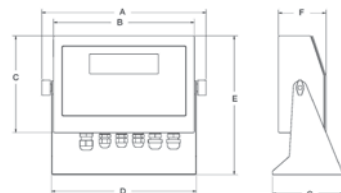*Electrical approval for Universal **Electrical approval for Panel Mount

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"

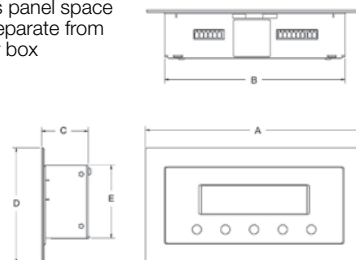
PANEL MOUNT

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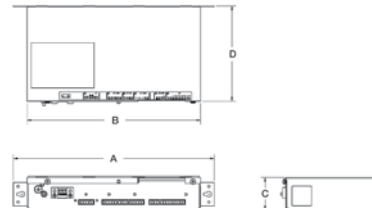
A = 7.36"
B = 6.12"
C = 1.58"
D = 3.88"
E = 2.45"

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"

RICE LAKE
WEIGHING SYSTEMS
To be the best by every measure®