720i™

PROGRAMMABLE HMI INDICATOR/ CONTROLLER

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

To be the best by every measure®

www.ricelake.com

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 display the same data simultaneously. 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 operator to easily create new keys and understand functions and selections.

Configurable Batch Engine
Allows you to design your own multi-step procedure to run automatically 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

The 720i is designed to be a superior tool for the management of busy scale operations. Interface this indicator with any number of peripherals—PC's, printers, stop/go lights, or remote displays. Local remote capability allows you to install one indicator at the scale and a second at a remote location while sharing the same weight data. Give each indicator its own printer and generate scale tickets on demand at either location.

It's common for a truck to arrive on a truck scale full and leave empty, in which case value swapping is an important feature. Your 720i can interpret which value is the tare to print tickets with an accurate gross-net value. No negative numbers. No misinterpreted information. Store up to 1000 individual tare values for recall at any time.

Multi-range and multi-interval capabilities allow a scale to display in as many as three different intervals. For example, a scale used to weigh both heavy trucks and livestock might display lighter loads

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.

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 thirty-two 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).
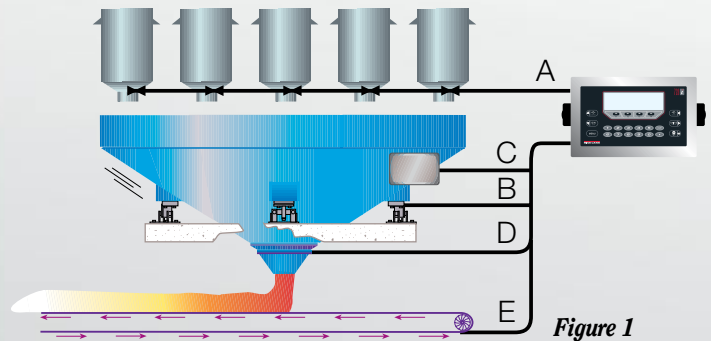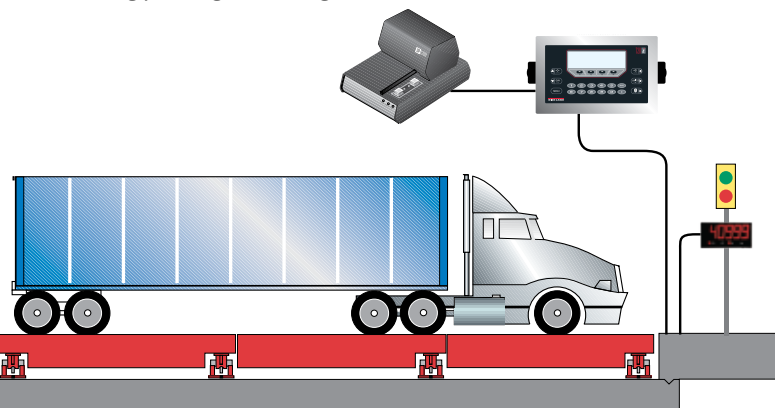
Figure 1

ProAction
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.

in 5lb increments and heavier loads in 20lb increments. Multi-range will continue to use the interval of the highest value achieved until returning to zero, while multi-interval will adjust up and down accordingly through each range.

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
- 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

Funtionality:
- Two full duplex serial ports
- One remote keyboard port
- Slot for option cad
- 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)
- 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

PROFIBUS

Ethernet connectivity

Specifications

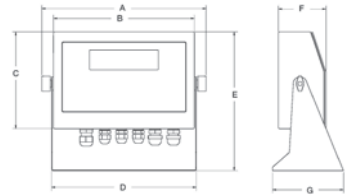|	
Display Viewable area:	Panel mount 3.8" x 1.2" (96 x 30 mm); Universal 5.3" x 1.5" (133 x 39 mm) 240 x 64 pixel, back lit VGA Liquid Crystal Display (LCD) module with adjustable contrast
Excitation Voltage:	10 VDC, 16 x 350 Ω load cells
A/D Sample Rate:	7.5 to 960 Hz, software selectable
Resolution:	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)

Enclosure Options

UNIVERSAL MOUNT

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

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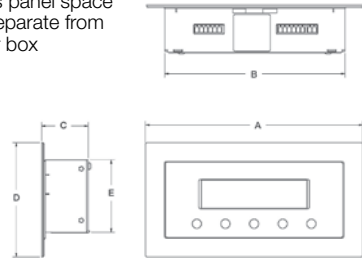C = 7.25"
D = 10.80"
E = 10.38"
F = 3.52"
G = 5.25"

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"

Approvals

NTEP
CC#08-022

OIML
Pending

Measurement Canada Approved

TÜV PRODUCT SERVICE

C€

c UL us LISTED *

c UL us **

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

RICE LAKE
WEIGHING SYSTEMS

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