

RINSTRUM 5100

MULTI-FUNCTION

DIGITAL INDICATOR

HIGHLIGHTS

- NMI Trade-Approved
- Animal Weighing
- Hold and Peak Hold
- Counting and Totalising
- Alpha-Numeric Keypad
- Large Back-Lit LCD Display
- Intelligent Batching Option

FEATURES



The Rinstrum 5100 multi-function design and its impressive list of standard features permit it to competently perform most weighing applications. Optional outputs for serial and analog transmissions, setpoints and stand-alone intelligent batching are also available.

This unit is fitted with an alpha/numeric keyboard and a custom built, 20mm LCD display with backlighting for use in all lighting conditions -including direct sunlight.

The blank key is for operator functions and supplied labels are used to name the key to suit the current application: count, show total, start, show peak, manual jog, etc.

In batching, the 5100 is very "operator friendly" with recipe codes and material names being stored/recalled in full alpha-numeric text up to six characters long, (eg. Cement, Flyash. Sand, Water, etc.).

Up to 100 recipes can be stored, each with it's own preset tare value. Batch sizes can be altered in either "%" or "times" values; ie 380% of value or 3.8 times value. This allows up to 10,000 separate batch sizes to be readily batched at any time.

The auto-inflight and auto-jogging software ensures accurate filling of all materials, including those with inconsistent flow characteristics.

The 5100 also has both statistical data and full batch logging available for both viewing through the display and/or printing or downloading to external devices.

There are six relay status annunciators to show which relay outputs are currently active. The secondary 3½ digit display can indicate the % completion of products, recipe number or used as a real time clock.

The totalising and counting functions are greatly enhanced. Up to 100 product IDs can be stored and

recalled by alpha/numeric codes and it is possible to get product totals listing number of items, total weight and the average weight (globally or by individual codes).

Manual filling applications using setpoint functions without the need for relays (concrete batch plants using a front-end loader to manually fill aggregate bins with various materials) are also well catered for. Up to 20 materials and weights can be stored/recalled in a single recipe. Individual relays can be globally assigned for all materials as a "fill in progress" output, or "tolerance error" or "batch complete", etc.

For multiple setpoint applications (up to 20 different feeders), the Ranger 5100 has in-built software to communicate directly with various Mitsubishi and National PLC's. The 5100 instructs the PLC via the serial port which relays should be energised/switched.

The 5100 retains all the outstanding performance characteristics of the Ranger 5000 with 100,000 divisions available @ 60 updates per second and there are single range, dual range and dual interval modes.

There is even a direct mV/V input mode for calibrating large silos and vessels without using test weights.

The "adjustable everything" programme allows for the serial strings to be formatted to suit specific customer requirements. Printed data output can also be formatted to suit pre-printed weight tickets and two lines of customer header information can be inserted.

The on-board clock/calendar/ram-backup ensures critical zero, tare, counting and batching data is not lost or corrupted during an unexpected power shutdown.

This unit can also remind the operator when the next Quality Assurance certification is due.

SPECIFICATIONS

PERFORMANCE	
Display	Backlit LCD with 20mm, 6 Digit Primary Display
Display Resolution	Up to 100,000 Divisions, Minimum of 0.15 μ V/Division
Count-by	1, 2, 5, 10, 20, 50, 100
Operating Modes	Single Range, Dual Interval, Dual Range and Direct mV/V
Zero Cancellation	\pm 2.0mV/V
Span Adjustment	0.1mV to 3.0mV Full Scale
Stability/Drift	Zero: < 0.1 μ V/ $^{\circ}$ C, Span < 10ppm/ $^{\circ}$ C, Linearity < 20ppm, Noise < 0.05 μ V p-p
Operating Environment	Temperature -10 $^{\circ}$ C to +50 $^{\circ}$ C, Humidity < 90% Non-Condensing
DIGITAL	
Setup and Calibration	Full Digital with Visual Prompting in Plain Messages
Memory Retention	Full Non-Volatile Operation
Digital Filter	Averaging from 1 to 200 Consecutive Readings
Zero Button	Adjustable from 4% to 100% of Full Capacity
A/D CONVERTOR	
Type	24 Bit
Resolution	8,388,608 Internal Counts
A/D Sync Filter	Adjustable, 15 to 60 Cycles/Second, FIR Filter > 80dB
LOADCELLS	
Excitation	8V for Up to 8 x 350 Ω Loadcells
Load Cell Connection	6-Wire and Shield
SERIAL COMMS	
Serial Outputs	Dual RS-232, Plus RS-422/RS-485 on Port 1; RS-232 on Port 2
Capabilities	Automatic Transmit, Network and Printer Drive
Clock	Battery Backed Clock and Calendar Fitted
DIMENSIONS	
Case Size	135mm(W) x 65mm(H) x 105mm(D), Front Bezel is 180mm Wide x 82mm High
Panel Cutout	DIN 43 700 - 137mm +1 Wide x 68mm +1 High
POWER SUPPLY	
DC	12-24VDC, 10VA
AC	110VAC to 240VAC, 48Hz to 62Hz, 8VA
OPTIONS	
Setpoint Option Card	4 x Isolated 50V, 500mA Open Collector Transistor Drives and 4 x Isolated Digital Inputs (5V to 28V)
Combo Option Card	-10 to10 V or 4-20mA Opto-Isolated Analogue Output, Two Outputs and One Input as per the Setpoint Option Card
Number of Option Slots	One Standard (12-24VDC Units Can be Specially Ordered with Two Option Slots)
FEATURES	
	NMI Trade-Approved to 6,000 Divisions, C-tick Approved
	Five Point Linearity Correction
	Adjustable Anti-Vibration Filter
	Comprehensive Batching Operation (Requires Setpoint Accessory Card, Combo Card, or PLC and Licenses) (PLC Interface Allows 6,14 or 22 Relays)
	Modbus Protocol Support (License Option)

Accuweigh Pty Ltd

WESTERN AUSTRALIA (HEAD OFFICE):
PHONE: (08) 9259 5535

SOUTH AUSTRALIA OFFICE:
PHONE: (08) 8447 5011

NEW SOUTH WALES (SYDNEY) OFFICE:
PHONE: (02) 9728 4877



www.accuweigh.com.au

VICTORIA OFFICE:
PHONE: (03) 9548 5554

NEW SOUTH WALES (NEWCASTLE) OFFICE:
PHONE: (02) 4966 8900

QUEENSLAND OFFICE:
PHONE: (07) 3265 5520