

# UC-100 Universal Controller

One versatile controller all your weighing & automation applications.



## All in one Controller

- Pre-programmable, customised to your needs
- Alpha Numeric keypad
- Standard Loadcell input
- Pulse/Counter input
- Digital inputs and outputs for interlocks & commands
- LED and LCD display
- Two serial ports i.e. RS232C / RS485 for PC / PLC / printer interface (local / remote)
- 32 bit ARM Controller
- High Resolution, High Speed
- Digital Calibration for Load & Disp
- Automatically stores transaction history
- Real time clock

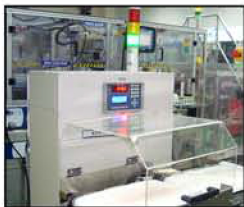
## Attention :

OEM's, System Integrator, Dealers & End-Users

This is an extremely versatile multipurpose controller serving a very wide range of applications. The physical hardware (body) is the same, only the firmware (personality-brain) changes. It takes a generic load cell signal and also encoder (pulse) input signal. It is applicable for any weight or load range depending on load cell capacity used as input signal.

*Ideal for OEM  
machine manufacturers  
e.g. packing, filling,  
testing machines*

## Applications



Check Weighing System



Batch Weighing System



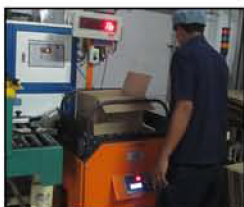
Bagging Systems



Cumulative Online Weigher



Liquid Filling System



Smart Counting System



Belt Weighing System



Multi Component System

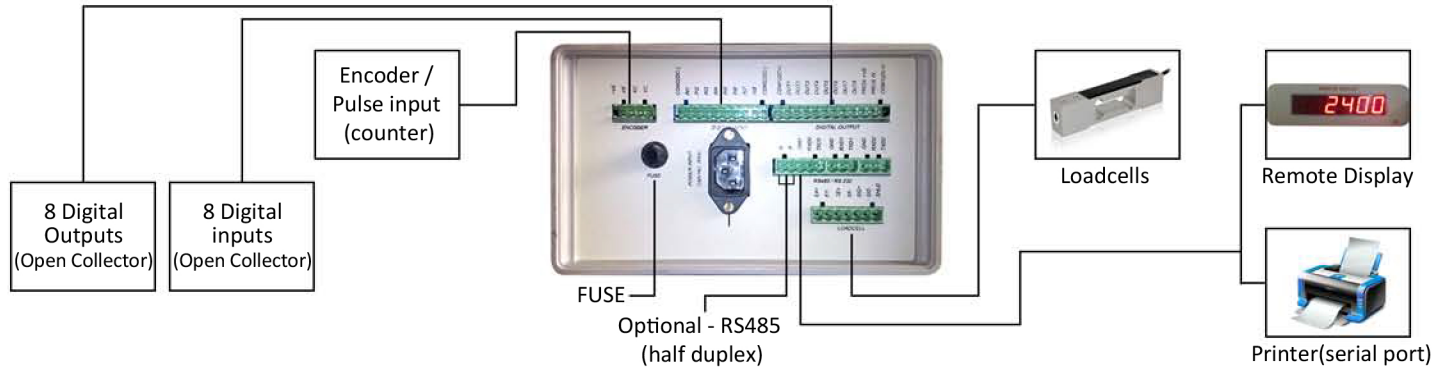


Universal Testing Machine



Cashew Packing System

## Rear Panel View of UC-100



## Specifications

### Indicator Power

- Power Supply ----- Voltage 90V to 245V AC, max 30W
- Controller ----- RTC Built, 32-bit high speed ARM7

### A/D Converter

- Type ----- 24-bit Delta Sigma
- Analogue Input Range -- 0 - 25 mV
- Linearity ----- <0.03% FS
- Conversion Rate ----- 1-0 SPS or 650 Samples/Sec
- Internal Resolution ----- 1 in 1,30,000
- Display Accuracy ----- 1/30,000

### Display & Keypads

- LCD Display ----- 4 lines 20 character
- LED Display ----- 6 digits 7 Segment LED Display
- Keypads ----- Capacitive Sense 17 alphanumeric keys

### Calibration & Weighing

- Digital Calibration ----- By test weights
- Weighing Functions ----- Auto Zero, Power On Tare

### Load cells

- Excitation ----- 5 VDC
- Load cells ----- Drives 8 Load cells of 350  $\Omega$

### Encoder

- Pulse Input ----- 5V DC supply A,B input

### Memory

- EEPROM ----- 512 kilobites (storing records / setup details)

### Inputs & Outputs

- Two Serial Ports ----- RS232C / RS485 for PC / PLC / printer interface (local / remote)
- Connectors ----- R/A pluggable terminal connectors
- Collector Output ----- 8 isolated open collector outputs for 500mA
- Isolated Inputs ----- 8 isolated inputs for 24 VDC max

### Mechanical Data

- UC -100 Indicator's Cabinet Size -- 200mm (L)\*125mm (H)\*207mm (W)
- UC -100 Panel Cutout Details ----- 122mm (H)\*206mm (W) with mounting hole 240mm (L) \*60mm (H) at 4 holes 5mm diameter
- UC -100 Gross Weight ----- 3.10 Kg

### Environmental

- Operating Temperature ----- (-10°C to 40°C)
- Storage Temperature ----- (-25°C to 70°C)
- Relative Humidity ----- 90% R.H without dew
- IP Level ----- Front panel IP 55

### Diagnostic

- Self diagnostics for all modules ( A/D, Display, Serial port, RS232, RS485, Digital O/P, Digital I/P, Key functionality )
- Calibration backup and restore options

### Models

- UC-100 REV A ----- A/D Conversion Rate (10 SPS)
- UC-100 REV D ----- A/D Conversion Rate (650 SPS)

## Physical dimensions of UC-100

