



**AUSTRALIAN
WEIGHING
EQUIPMENT**
Way ahead in Weighing

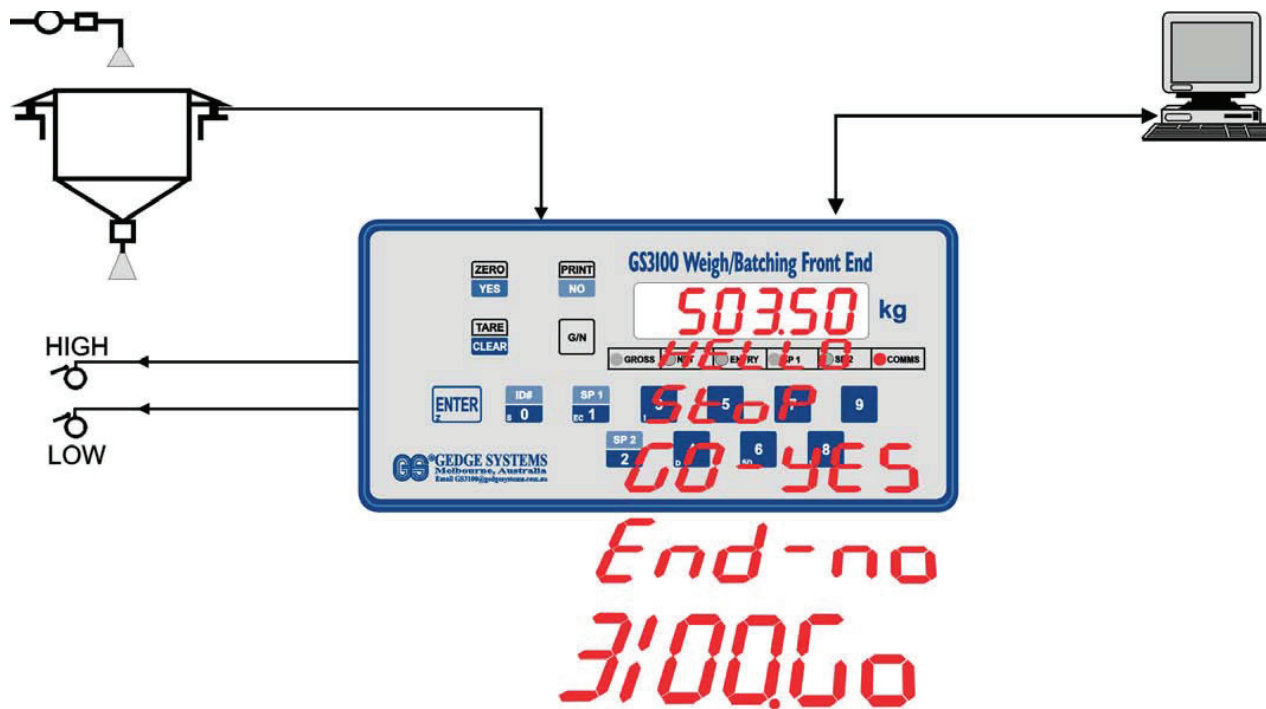
PRODUCT GUIDE

GS3100 BATCHING FRONT END





FEATURES



- NOW with ANALOG Output OPTION6HPF for 4-20mA & 0-10VDC 14bit (1:16,000) Accuracy.
- MODBUS RTU & ASCII Option Available.
- A World First - the First Weight Indicator designed from the ground up as a Front End for Computer/PLC Controlled batching.
- Computer/PLCs can use the GS3100 to talk to "factory floor" operators in the plant or across the World. The remote Computer/PLC can completely control the GS3100 including using the GS3100's display to show messages and the GS3100's keyboard for operator inputs. (Requires I/O Option)
- Turn serial stream data ON and OFF as required. The remote Computer/PLC can turn-on and turn-off the GS3100's serial weight data stream to obtain high speed weight data only when needed during time critical periods. (Requires I/O Option)
- Standard "no-extra cost" RS-232 Serial Output supplies weight data at 4800 or 9600 baud to 20 times per second.
- Year 2000 Compliant in every respect.
- Full Range of Programmable Settings. The GS3100's extensive range of keyboard programmable settings allows it to be "customized" to suit any application. All weight calibration and set up is entirely carried out using the GS3100's keyboard.
- Standard Dual Optically Isolated Set points for High and Low Alarms - a vital safety measure. 5-48VDC 1Amp outputs can drive solenoids and relay coils.
- Full SIX wire load cell connection automatically and accurately compensates for long load cell cable runs typical in weigh/batching applications. NOTE:- FOUR wire products cannot compensate for long cable runs which can result in errors of 10% or more.
- Assured and Guaranteed Accuracy and Stability. Every GS3100 shipped has spent one day in our "oven" cycled between operating temperatures of -10oC and +40oC. Its accuracy and stability has been checked and meets or exceeds our specification. Guaranteed - you can rely on it.



GS3100 Batching Front End

- High Speed 20/second operation tuned to provide rapid response.
- Easy to mount short body enclosures - 150mm Body length and 180mm total depth with connectors allows installation into a standard 200mm depth enclosure.
- Easy to Calibrate. Display any weight to 199990 settable with display resolution of 400 to 10,000 divisions and adjustable "count by" settings 1, 2, 5, 10, 20 and 50 - all set via the GS3100's keyboard.
- Added security - the GS3100 records all attempts to access its set up and calibration settings - this information is displayed when power is applied - it is also available with the use of an optional serial I/O card. Operator friendly sensibly sized keyboard and display - 12mm keys and 14mm display.
- Quality Assured. All features 100% performance tested before shipping.
- C-Tick Approved N1840

■ SPECIFICATIONS

LOAD CELL INPUT. -1mV to 45mV; 400-10,000 divisions of 1.00mV/d to 60mV/d. Displays -4% to +104% FS range. Excitation 10VDC Short Circuit Protected drives up to EIGHT 350ohm Load Cells to 230mA max. True differential remote sensing using a separate pair of wires for Full SIX wire load cell connection. Source Impedance 2kohm maximum. Input Impedance 10Mohm minimum.

FRONT END ACCURACY/STABILITY. Linearity $\pm 0.01\%$ FS; Span ± 15 ppm/oC; Zero ± 500 nV/oC ± 30 ppm/oC of dead load offset. All units 100% checked for thermal stability over the operating range -10oC to +40oC; Noise 1mV p-p RTI maximum. Active 2Hz 2 Pole Low Pass Analog Filter plus Digital Filtering via 1/2/4 Averaging. Weight update rate 20/second, 10/second or 5/second selectable.

CONTROL OUTPUTS. TWO control outputs, one for each set point. Each is an optically isolated open collector capable of sinking 1Amp 5-45VDC from user supplied external power supply.

STANDARD SERIAL OUTPUT. RS-232C non-isolated serial output, 4800/9600baud. Word composition: 1 start bit; 7 data bits; 1 even parity bit (or 8bits no parity) plus 2 stop bits. Data output user selectable including:- Gross, Net and Tare; Weight Status; Set Point Status; ID Number and Set Point Value. Output rate 20, 10 or 5 per second.

FRONT PANEL. SIX digit 14mm high 7 segment High Intensity red LED display to 199990 plus SIX LED lamps. Positive action tactile feedback fifteen key - keyboard behind tough water resistant membrane.

STANDARDS. Conforms to European Electromagnetic Emissions & Immunity Directive 89/336/EEC and Australian C Tick Standards Approval N1840.

PHYSICAL/ENVIRONMENTAL. All metal enamel finished panel mounting enclosure c/w panel mounting slides. Front 198mm W x 96mm H; Body 184mm W x 90mm H x 149mm L. Panel cut out 186mm W x 92mm H. Panel rear projection 137mm plus 39mm for standard connectors or plus 58mm for optional serial card connector. Weight 1.9kg; Shipping weight 3kg. Environment -10C to + 40C Operating; -15C to + 70C Storage; to 95%RH non condensing. Power 100-240VAC (specify on order) $\pm 10\%$ 49-62Hz 19VA.



GS3100 Batching Front End

■ **OPTIONS**

SERIAL OUTPUT OPTIONS. An optional serial output card can be fitted for applications requiring signal levels or baud rates that differ from the standard RS-232C serial output. Output string contents are the same as the GS3100's standard serial output, only the electrical signal levels differ. RS-232C can be used for cable runs to 15m, use 20mA Current Loop up to 50m and RS-422A/RS-485 up to 1,000m. Data rates:- 600 to 9600baud. Word composition 1 start bit; 7 data bits; 1 even parity bit (or 8bits no parity) plus 2 stop bits.

Option cards are:- Option 02 RS-232C Non-Isolated; Option 202 RS-232C Optically Isolated; Option 207 Dual Simultaneous Serial Output RS-232C & 20mA Current Loop (passive) both Optically Isolated; Option 05 20mA Active Current Loop; Option 09 RS-422A.

SERIAL INPUT/OUTPUT OPTIONS. The full power and flexibility of the GS3100 in a Weigh/Batching Front End role is obtained by installing a serial Input/Output option. Select RS-232C for cable runs to 15m, use 20mA Current Loop up to 50m and RS-422A/RS-485 to 1,000m. Data rates:- 600 to 9600baud. Word composition is 1 start bit; 7 data bits; 1 even parity bit (or 8bits no parity) plus 2 stop bits. Option cards are:- Option 07 RS-232C (Optically Isolated) & 20mA Current Loop (passive); Option 08 RS-422A & RS-485 Multi Drop, Optically Isolated.

ANALOG OUTPUT OPTION. Instead of Serial Data the GS3100 can transmit high precision/high stability 4-20mA and 0-10VDC via the 14bit (1:16,000) OPTION6HPF. Includes Load Simulation for external equipment adjustment.

MODBUS RTU/ASCII. The GS3100 can be ordered from the factory setup for MODBUS RTU/ASCII. Also requires an Optional serial I/O card Option07 or Option08.

■ **ORDERING**

ORDERING. Order GS3100 Weigh/Batching Front End. Specify mains voltage. The GS3100 is supplied with an Installation/Operation Manual, a mains cable, load cell and control output/serial output connectors and panel mounting hardware.

ORDERING OPTIONS. Order one option card from the above list. OPTIONS are supplied loose for user installation. A mating cable connector with metal back shell is supplied as standard with all Options.

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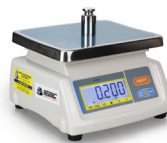
■ **AWE PRODUCT RANGE**



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Onboard Weighing



Batching Consoles



Test Weight



Maintenance



■ WHO IS “AUSTRALIAN WEIGHING EQUIPMENT GROUP”

Jeff & Trevor Baillie started Australian Weighing Equipment (or AWE) in 1981, focusing on weighing solutions based on engineering principles. For nearly 40 years AWE has built its reputation as a leading supplier of robust weighing, packaging & bulk handling equipment. Our innovative engineering and continuous product developments have led to designs that will stand up to the rigours and demands of your applications.

AWE has increased its investment in manufacturing facilities with a new 3,200sq/m factory in Sydney which has

- A CNC Machine Shop
- Heavy Metal Fabrication Shop
- Larger work areas for our team of qualified tradesman

Acquisitions of Bradwood Packaging and Dendy Packaging and Design Engineering has increased our packaging and engineering experience.

In 2008, AWE established a manufacturing facility in China - AWE Group Packaging and Bulk Materials Handling Equipment, a purpose-built 5,000sq/m factory in Suzhou China (70kms From Shanghai).

All of the products we offer are Australian designed and manufactured under our strict quality control system in our own factories both locally and internationally.

■ LOCATIONS OF AUSTRALIAN WEIGHING EQUIPMENT



Australian Weighing
Equipment - Sydney Office

8 Heald Road
Ingleburn NSW 2565



Australian Weighing
Equipment - Melbourne Office

37 Barrie Road
Tullamarine, VIC, 3043



Australian Weighing
Equipment - Brisbane Office

7 Darnick Street
Underwood, QLD1 4119

■ AUSTRALIAN WEIGHING EQUIPMENT ON SOCIAL MEDIA



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