

GS100R

LOADCELL PROCESS CONTROLLER



GS100R SUMMARY

The GS100R is the ideal controller for high-speed, high-accuracy weighing, batching and level measurement operations.

The offset and span trim calibration functions make this controller ideally suited for tank and silo applications, as the system can be calibrated without the application of test masses.

Relay, serial and analog output options make it valuable for stand-alone control or as an interface for PC, PLC & HMI applications. It is also popular as a trip amplifier, where the low setpoint might find applications for slack rope or low tank level, and the high setpoint might be overload or high tank level.

Intuitive scrolling text menus guide you step by step through the effortless setup and calibration process, making the **GS100R** the world's most user-friendly and versatile load-cell controller.

TYPICAL APPLICATIONS

- Tank level controller
- Tank farm signal conditioner
- Crane trip amplifier
- Silo weighing instrument
- Weight transmitter (analog or digital)
- Modbus network interface
- Weighing interface to PLC

WHY BUY GS100R?

The GS100R full-function weighing controller features a compact design, allowing instruments to be close coupled on a standard 35mm DIN rail. You will find most of our competitors lack the following essential features:

- Locally designed and manufactured
- Most configurations are Ex-stock Melbourne works
- Full isolation of supply, loadcells and outputs
- Drives up to 8 loadcells
- Lowest cost feature for feature instrument on the market

GENERAL SPECIFICATIONS

<i>Input</i>	4/6-wire strain gauge 1-5mV/V
<i>Power supply</i>	HV - 85-265V AC / 95-370V DC LV - 15-48V AC / 10-72V DC
<i>Relay outputs</i>	2 programmable form A relays with hysteresis and delay on make
<i>Analog output</i> [OPTIONAL]	Isolated 16-bit 4-20mA / 0-10V output (fully scaleable). Window programmable over any range within the full-scale range of the controller. 7Hz.
<i>Serial port</i> [OPTIONAL]	Isolated option 2 or 4 serial port » Modes: ASCII, Modbus RTU slave, Ranger A output » Data ranges: 300-38400 » Parity: Odd, even or none
<i>Excitation</i>	5V DC excitation supplied (powers up to 8 x 350Ω load-cells)
<i>Sampling rate</i>	Up to 50Hz
<i>Resolution</i>	18-bit
<i>Accuracy</i>	0.005% of reading
<i>Temperature drift</i>	Typically 3ppm/°C
<i>Calibration</i>	Pre-calibrated for 0-10,000 counts (2mV/V sensor gain at full scale). Can be recalibrated using the auto (apply mass) or mV/V method. Adjustable zero offset and span.
<i>Easy setup</i>	Intuitive text prompts facilitate easy setup
<i>Security</i>	Calibration and setpoint functions have independent security code access. Direct access to setpoint activation values is independently configurable.
<i>Inputs</i>	Hold, lock, tare, batch, zero, peak hold and print remote commands

OPTIONS (AS SPARE PARTS)

GS - 2

RS232 isolated serial output

GS - 4

RS485 isolated serial output

GS - A

Analog isolated source powered output (4-20mA, 1-5V)

GS100 SERIES ORDERING CODES

GS100

Gedge Series

R

DIN 35 rail mount

- **LV**

15-48V AC / 10-72V DC power supply

- **HV**

85-265V AC / 95-370V DC power supply

- **R**

Relay outputs (2) form A

- **2**

RS232 isolated output

- **4**

RS485 isolated output

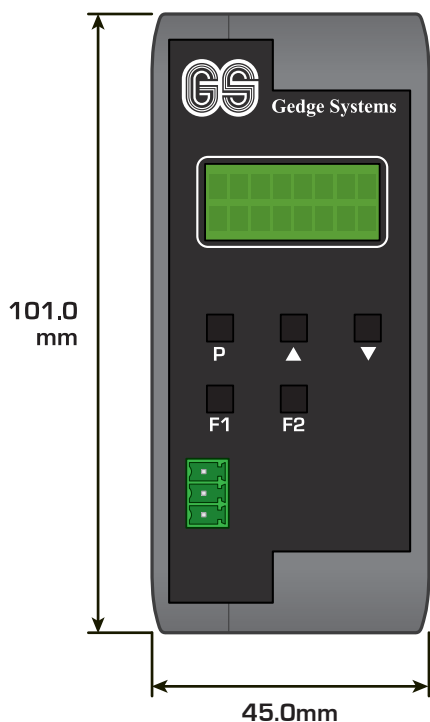
- **A**

Analog output option installed

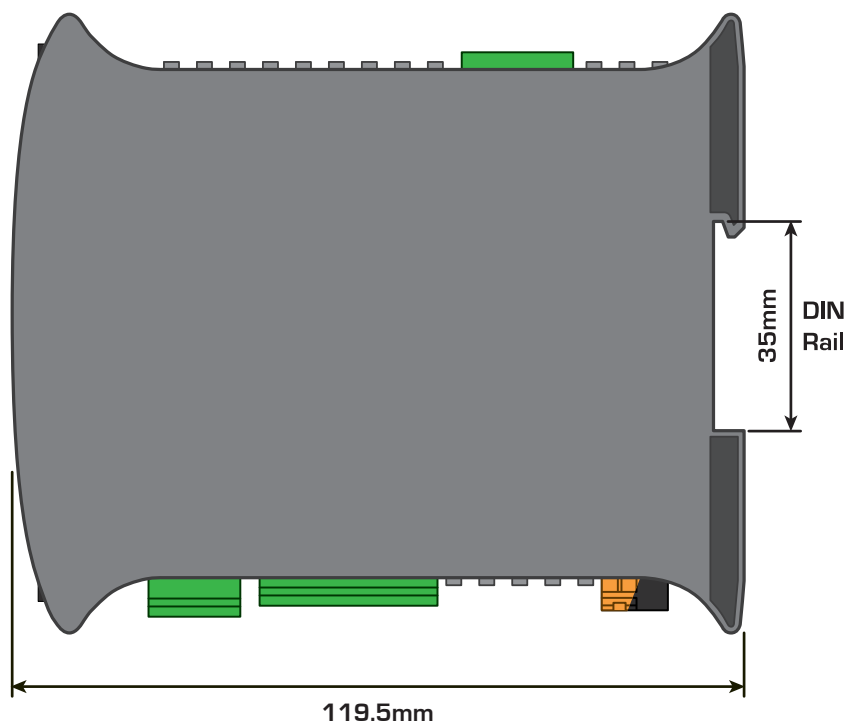
CASE SPECIFICATIONS

<i>Display</i>	LCD alphanumeric. 2 display rows, 8 digits per row (16-characters total).
<i>Serial port</i>	Front panel serial port (option 2 or option 4).
<i>Buttons</i>	5 buttons. Program, up, down and 2 menu buttons.
<i>Dimensions</i>	101 x 45 x 119.5mm (H x W x D). Mounts to 35mm DIN rail.

FRONT VIEW



SIDE VIEW



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