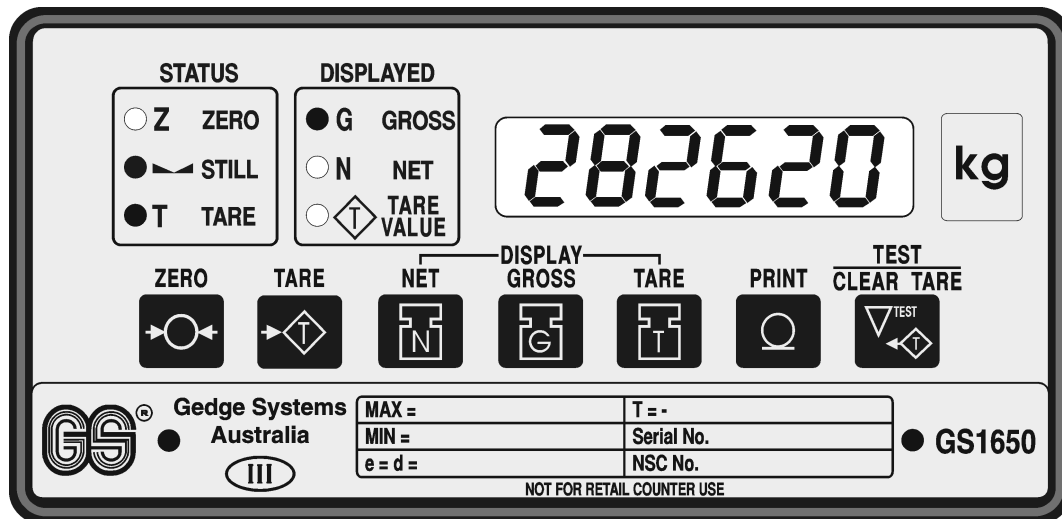


GS1650Mk3 Digital Weight Indicator.



KEY FEATURES

- **12,000 Divisions Display Resolution.** 48,000 Count Internal resolution. Can be setup in weight increments of 1, 2, 5, 10, 20 or 50.
- **Linearity Correction** allows any installation to be Accurately Linearized by using One Easily Set Linearity adjustment setting.
- **Ease of Installation.** The GS1650Mk3 was the FIRST to use fully automated on-site weight calibration and front keyboard setup. Tens of thousands of users World Wide report it as still the WORLD LEADER in simplicity of installation – it's their preferred choice - often imitated by competitors but never equalled or bettered.
- **Sensibly Sized Front Panel and Keyboard.** The 12mm keys can easily be operated while wearing gloves and the large six digit 14mm LED display is clearly readable from a distance and in low light conditions.
- **Designed to Withstand the Heat.** Unlike miniature weight indicators having high component densities which could make them prone to overheating, the GS1650Mk3 RUNS COOL, due to it's purpose designed generous layout which enhances heat dissipation.
- **Stainless Steel IP65 Enclosure.** For the ultimate in harsh environment protection, the GS1650Mk3 can be supplied in an optional Stainless Steel IP65 rated enclosure, the model SE02.
- **Full Range of Options.** Options including Time and Date, Simultaneous Analog & Serial Outputs and Optically Isolated Serial Options
- **Australian Weights and Measures Approved to 8,500 divisions.** NSC Certificate S193B.
- **IP65 Stainless Steel Remote Display.** With the fitment of a low cost serial card (Option01), the GS1650Mk3 can be connected to as many as eleven remote displays and weight controllers over distances to 1,000 meters. These include the IP65 rated Stainless Steel housed 40mm High Visibility Remote Display model GS1040-99, perfect for all weight "display repeater" applications.
- **Assured Quality.** Through experience, design and in-house production control. Also each Indicator is shipped with a signed and numbered quality certificate.
- **Weight Indicators of Choice.** Gedge Systems Weight Indicators are chosen by more Major Australian Weighbridge & Scale Manufacturers than any other Brand - and for good reason:- Quality, Reliability, Accuracy, Australian Made and able to be Supplied & Installed for a Fair Total Cost.
- **Fully Compliant.** Meets the latest Australian and European EMI/RFI immunity and emission standards and fully Y2K compliant.

Y2K CE PROSEC PAC N1840

GS[®] GEDGE SYSTEMS

Since 1978 Australia's Leading Manufacturer of High Accuracy Weighing Electronics

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Specification GS1650Mk3

LOAD CELL/S INPUT. -1mV to 45mV calibrated 400 to 12,000 display divisions at 0.33 μ V/division to 45 μ V/divisions. Displays -4% to +104% FS range. Excitation 10VDC Short Circuit Protected drives up to EIGHT 350ohm Load Cells in parallel to 230mA max. True differential remote sensing using a separate pair of wires. Source Impedance 2kohm maximum. Input Impedance 10Mohm minimum.

FRONT END ACCURACY/STABILITY. Linearity $\pm 0.01\%$ FS; Span ± 7.5 ppm/ $^{\circ}$ C; Zero, for dead load input from -1mV to +20mV the greater of 1dd/ 5° C or 200nV/ $^{\circ}$ C; Noise 1 μ V p-p RTI maximum. Active 2Hz 2 Pole Low Pass Analog Filter plus Digital Filtering.

LINEARITY ADJUSTMENT. Can be setup to apply one linearity correction anywhere within the weighing capacity. The linearity adjustment, which, for the ultimate in accuracy is entered in quarter division increments, can correct for up to 31 display divisions of non-linearity. The correction, which is automatically proportioned, need not be symmetrical around the point of maximum error.

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

STANDARDS. Approved by Australian Weights and Measures for use to 8,500 divisions Certificate S193B. Year 2000 Compliant. Conforms to the requirements of the Australian electromagnetic Compatibility Framework C-Tick Regulations. Conforms to European Electromagnetic Emissions & Immunity Directive 89/336/EEC.

PHYSICAL/ENVIRONMENTAL. All metal enamel finished panel mounting enclosure with Optional panel mounting slides. Front 198mm W x 96mm H; Body 184mm W x 90mm H x 246mm L. Panel cut out 186mm W x 92mm H. Panel rear projection 232mm (allow extra 70mm for connectors). Weight 2.3kg; Shipping weight 3kg. Environment -10C to +40C Operating; -15C to +70C Storage; to 95%RH non condensing. Power 100VAC to 240VAC (specify on order) $\pm 10\%$ 49 to 62Hz 15VA. Rear Panel includes Power receptacle, Fuse/fuse holder, 9 pin D load cell connector plus cutouts for three Output Options Connectors.

Options and Ordering

OPTION 01 GS Peripheral Serial Output. 62.5kbaud balanced line serial output connects one to eleven Gedge Systems' Remote Displays and Batch Controllers over distances to 1,000m. Also provides isolated inputs for Print, Tare & Gross

SERIAL OUTPUT OPTIONS. Select from FOUR serial output options to send data to Printers and Computers. Output string contents are all the same, only the electrical signal levels differ to suit transmission line lengths. Select RS232C for up to 15m, 20mA for up to 50m and RS422A/RS485 for up to 1,000m. Data rates are:- 600 to 19,200 baud. Word composition is 1 start bit; 7 data bits; 1 parity bit set to odd, even, 0 or 1; plus 2 stop bits. Models are:- **Option 02** RS-232C; **Option 202** RS-232C Optically Isolated; **Option 207** Dual Simultaneous Serial Output RS-232C & 20mA (passive) both Optically Isolated and **Option 09** RS-422A:

SERIAL INPUT/OUTPUT OPTIONS. Select from TWO serial I/O Options whose string contents are the same, only the electrical signal levels differ to suit transmission line lengths. Select RS232C for up to 15m, 20mA for up to 50m and RS422A/RS485 for up to 1,000m. Data rates are:- 600 to 19,200 baud. Word composition is 1 start bit; 7 data bits; 1 even parity bit; plus 2 stop bits. Models are:- **Option 07** RS-232C (Optically Isolated) & 20mA (passive); **Option 08** RS-422A & RS-485 Multi Drop, Optically Isolated.

OPTION 03 Parallel BCD Output. Five Digit parallel BCD output plus 8 status lines, 1 busy line, Hold Input & Output Enable. Outputs Tri-State CMOS 10 LSTTL sink capability.

OPTION 06 or 06HP Analog Output. High stability 12 bit standard (1 in 4,000) or 14 bit model 06HP (1 in 16,000) D /A Converter driven output 0-10VDC & 4-20mA active current loop. Output scales automatically to the calibrated span of the indicator and goes precisely to zero when the indicator is "zeroed" or "tared". Output can be selected as displayed weight, gross weight or net weight. The GS1650Mk3 can be simultaneously fitted with any Option06 card as well as any of the Serial Options.

OPTION 04 Panel Mounting Kit. Heavy duty panel mounting clamps.

OPTIONS BR1 & BR2 BATTERY BACKED MEMORY & CALENDAR/CLOCK. Factory fitted battery backed memory (**BR1**) and Y2K Compliant Calendar/Clock (**BR2**) to retain Tare and Zero Tracked values on power failure and to provide Time and Date for Printer Outputs.

OPTION SE02 IP65 Stainless Steel Enclosure. Order SE02 for FREE factory fitment of the GS1650Mk3 into the high quality IP65 rated type 304 stainless steel enclosure.

ORDERING THE INDICATOR. Order GS1650Mk3 Digital Weight Indicator, specify mains voltage and, if required, Option BR1, BR2 or SE02. The GS1650Mk3 is supplied with an Installation/Operation Manual, a Signed & Numbered Quality Certificate, a mains cable and a load cell connector.

ORDERING OPTIONS. Order Option 01 to Option 207. All options are supplied loose for user installation. The GS1650Mk3 can be fitted with up to three simultaneous outputs comprising two serial outputs plus one analog output. (One Option 01 plus one Option 06 plus any one Option 02/07/08/09/202/207). If BCD output is required, then a maximum of only two outputs can be installed. (One Option 01 plus one Option 03). Mating cable connectors with metal back shells are supplied as standard with all Options.

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