



Portable Load Cell Indicator / Strain Gauge Indicator AS020

The AS020 is a portable battery powered 4.5 digit LCD indicator, providing automatic Zero and Span calibration as well as programmable linearity adjustment. Additional standard features include selectable Units button, Tare (Zero) button, Peak-hold button, load-cell overload indication, low-battery status, read-out of calibration in mV/V and programmable display resolution. The inputs provide EMI-/RF-suppression. Transducer and battery wires can be easily connected by soldering or using Molex connectors (supplied). Optional features include RS232 output, pre-drilled hand-held enclosure (IP65), protective rubber case, customer-specific enclosure foil and industrial standard sensor input socket.

Features

- Battery supply 3V (2xAA) or 9V (1xPP3)
- 5V stabilised bridge excitation
- Bridge resistance: 350 Ohm (or greater)
- Bridge sensitivity(max): 2.5 mV/V
- Board Size (LxBxH): 68 x 96 x 10mm
- Dual Units: lb/kg, kN/tonne, 10lb/tonne
- Auto shut-off
- Optional RS232 output
- Optional Hand-Held Enclosure
- Optional Enclosure Overlays



Applications

- Industrial Weighing
- Load Testing & Monitoring

Ordering

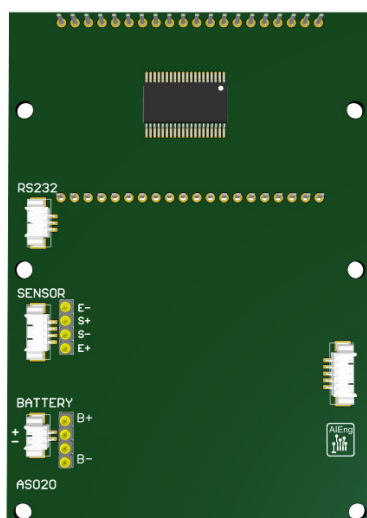
Part number: AS020-FULL

Default setting: 2mV/V, 1000.0kg, 3V battery

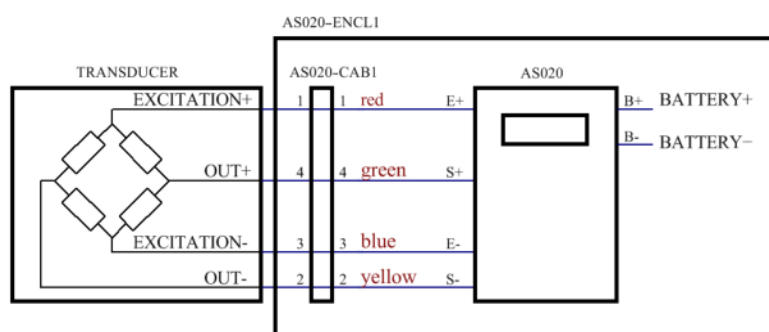
Please refer to manual for changing default settings.

**Customer specific electrical / mechanical changes are possible
– please contact us with your individual requirements.**

Board Connections



Schematic Diagram





Specifications

Parameter	Min	Typical	Max	Unit
Battery power supply (2xAA or 1xPP3)	1.5	3 or 9	12	V
Bridge sensitivity*	0.2		2.5	+/-mV/V
Bridge excitation voltage		5		V
Bridge resistance	350			Ohms
Linearity		0.01		% FS
Temperature coefficient – Zero		0.2		uV/°C
Temperature coefficient – Span		30		ppm/°C
Maximum display counts		19999		
Units (Dual)**	lb-kg, kN-tonne, 10lb-tonne			
Low-battery voltage status		"Lobt"		
Load-cell overload status ("HELP")		102		% FS
LCD digit height		10.2		mm
Battery auto shut-off***		20		minutes
Battery life (3V battery, 1000R bridge)		150		hours
Battery life (9V battery, 1000R bridge)		85		hours
Operating temperature	-20		70	°C

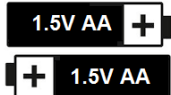
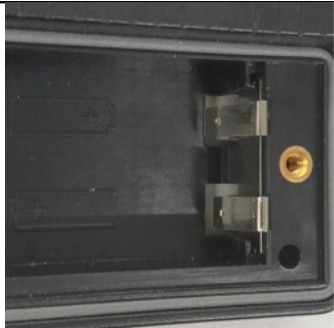
* available with other Auto Shut-Off times or without Auto Shut-Off on request

** Kip units (1000lb-tonne instead of 10lb-tonne) available on request

*** available for >2.5 mV/V bridge sensitivity on request

Battery Installation

The indicator can be powered by either 3V (2x 1.5 AA alkaline batteries) or 9V (1x 9V PP3 battery). The default setting is configured for 3V operation. For 9V operation please follow the instructions below.

Battery orientation	Left-hand side contacts	Right-hand side contacts
3V operation 	Installed	Installed
9V operation 	Installed	Not installed
Both left-hand side and right-hand side contacts are installed for 3V operation. For 9V operation carefully remove the right-hand side contacts, mindful of sharp edges!		



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Standard Part

Part number:	AS020-FULL		Includes Mainboard, IP65 ABS Enclosure, Connector (Binder Part no.: 09-3431-77-04) Blue Inlay (kg). Default setting: +/-2mV/V, 1000.0kg, 3V battery The unit can be easily reconfigured. See the user manual for details.
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https://www.aieng.co.uk/assets/pdf/AIEng_Datasheet_Load-Cell-Indicator_AS02X_Manual.pdf

Each display component can be purchased individually if required.

Part number:	AS020-MAINBOARD	Mainboard electronics
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Part number:	AS020-ENCL1	IP65 ABS Enclosure
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with display & push switch cut-outs; incl. 3V (2xAA) and 9V (1xPP3) battery contacts



Part number:	AS020-CAB1	Industrial Sensor Connector (4-pin)
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Binder Part no.: 09-3431-77-04



Part number:	AS020-CASE-YELLOW/BLUE	Protective Cases available in two colours
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