

The Digital Amplifier, GDAD141.1 is the ideal solution for non-automatic and automatic weighing, filling or loss-in-weigh applications.



FEATURES

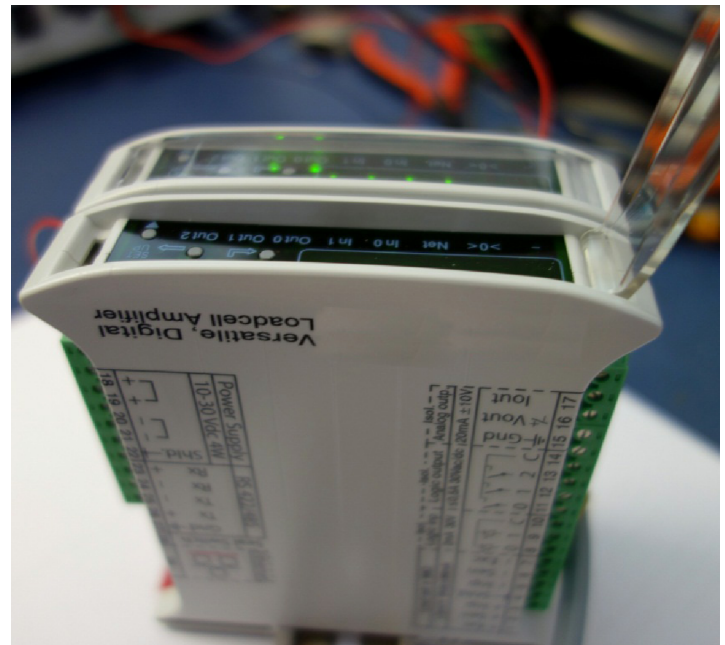
- **Weighing mode, Input:**
 - Drives up to 6 pcs 350 ohm Load cells.
 - External resolution $\pm 200\,000$ increments at $\pm 2\text{mV/V}$ input.
 - Output update rate 1-600 upd./sec.
 - Bandwidth 0,2-20Hz.
 - OIML R-76 Class III: 10000e; $e=0.25\ \mu\text{V/VS}$.
- **Input/Outputs, standard:**
 - Analogue current output.
 - Analogue voltage output.
 - Triple logic output.
 - Dual logic input.
 - Ethernet TCP/IP, selection of protocols.
 - RS485 full duplex.
- **Built in special programs:**
 - Check-weighing.
 - Dozing and filling of bulk goods (pending).
 - Loss-in-weigh applications (pending).
- **Features:**
 - Android App for remote set-up and calibration via a LAN (Wi-Fi or Blue Tooth).
 - Six digit display and keyboard for direct set-up, calibration and operation.
 - Advanced digital filter performance (FIR or IIR etc.).
 - Load cell (mV/V) calibration.
 - PC programme (Buzzard DOP) is available for set-up, calibration and process analysing.

APPLICATIONS

- Non-automatic and automatic weighing, filling or loss-in-weigh operations.
- Analog current- and voltage output, Ethernet, RS485 and logic I/O's for direct control of valves or bars and simple remote operations.

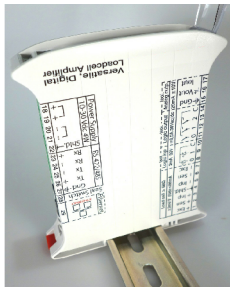
DIMENSIONS

Height /length/width	L:105mm (4.1"); H:120mm (4.7"); W22.5mm (.9")
Weight	170g (6oz)
All connection pins	Pluggable, coded, 5,08mm (0.2") pitch.
Mounting	To be clipped on to DIN Rail TS35



digital amplifier

GDAD141.1



SPECIFICATIONS

Performance	Linearity	<0.001% of full scale.
	Load cell excitation voltage	5 Vdc
	Load cell drive capability	R _{ic} : 58-2000 Ω (≤6 pc 350 Ω load cells)
	Load cell wiring system	6 wires inclusive sense
	Load cell input range	±3.3 mV/V equivalent to ±16,5 mVdc.
	Load cell input resolution	≈50 nV/incr. (≈200 000 counts at 2 mV/V input)
	A/D-conversion rate	600 updates/second
	Fix LP filter, default	20 Hz; 60 db/decade
	Adjustable digital IIR LP filter	18-0.25Hz; 40db/decade, selectable in 8 steps
	Adjustable digital FIR LP filter	19.7-2.5Hz, selectable in 8 steps
	Output update rate	600-0.6 updates/second, selectable in 8 steps
	Display averaging rate	5 updates/second
General I/O's	Hardware interfaces	RS485, drives 32 nodes or RS422 –full duplex
	Data transmission, rates, RS485	9.6; 19.2; 38.4; 57.6; 115.2 kB
	Data transmission, protocol	Get results or auto transmit
	Ethernet TCP/IP	Modbus and other protocols available. Isolated
	Analogue current output	0-20mA or 4-20mA. 500ohm. Isolated
	Analogue voltage output	0-10V; 0-5V; ±5V; ±10V. 10kohm. Isolated
	Logic inputs	2 (10-30 V; 1-3 mA) Separate grnd.; Isolated.
	Logic outputs	3 FET's (30 Vac; 0.5 A) Separate grnd.; Isolated.
	Internal calibration reference	2,000.0mV/V
	Power supply	10-30Vdc ≤15% ripple; ≤4Watt. Isolated.
Facilities	Display, optical spectral filtered	6 digit, 7seg. Green LED's, 5.08mm.
	Indicators	8 green LEDs.
	Keyboard	4 pc Ø3mm robust, short travel push buttons
	Sealing for legal operations (Green M)	Plug and key-board lid to be sealed with labels
Influences	Temperature effect on Zero	Typical ±2ppm/°K, Max ±4ppm/°K
	Temperature effect on Span	Typical ±4ppm/°K, Max ±8ppm/°K
	Temperature effect on Calibration Ref.	Typical ±4ppm/°K, Max ±8ppm/°K
	Relative humidity	0-95 % non condensing
	General I/O protection, all connections	Reversed polarity, excess voltage and surge
	Vibration	2.5 G operational; 5 G non-operational
	Protection un-installed, environment	IP40
Standards	Conform to Council Directive	CE in accordance with 2011/77/EC ; 2004/108/EC
	Certificate of EMC performance	2004/22/EC MID E2 (for industrial applications).
	Certified accuracy	OIML R-76 Class III: 10000e; e=0.25 μV/VSI

Dimensions and specifications subject to change without notice