

# load cell digitizer GLDU 78.1

GLDU 78.1 converts the load cell signal to digital format for reliable, precision weighing operations at high speed



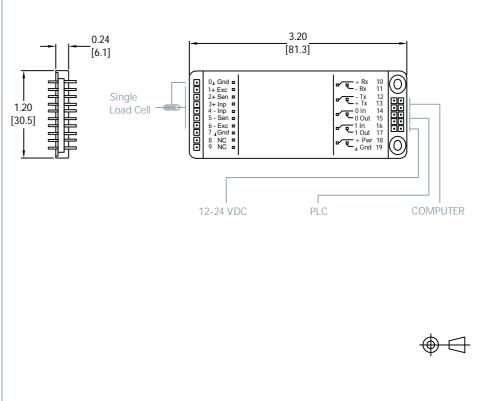
### **FEATURES**

- Drives up to four 350 ohm load cells.
- A library of included firmware for check weighing, grading or filling applications.
- RS 422/485 full duplex interface in 32 node networks or point to point.
- Offers dual logic outputs and dual logic inputs for the control of filling and sorting operations.
- A graphic presentation, analysis and set up PC program is available.

#### **APPLICATIONS**

- Especially designed for dynamic weighing such as check-weighing and filling systems.
- All LDU's are designed to be embedded into customers' equipment, to be plugged into a Unit Adaptor (Accessory) or otherwise integrated with a hosting device.

## DIMENSIONS



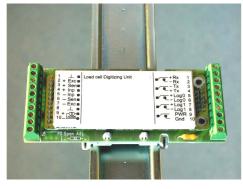
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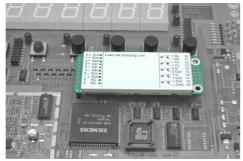
DIN TS35 rail mounted :



Load cell mounted :



PCB mounted :



#### **SPECIFICATIONS**

Input and A/D	
Linearity	<0.002 % of full scale
Load cell excitation voltage	5 Vdc
Load cell drive capability	RLC 80-2000 ohm (12-14 Vdc supply voltage)
	RLC 300-2000 ohm (14-24 Vdc supply voltage)
Load cell wiring system	6 wires inclusive sense or 4 wires
Load cell input range	±2.2 mV/V equivalent to ±11 mVdc
Load cell input resolution	<50nV/incr. (>±200 000 counts at ±2 mV/V input)
A/D-performance	2400 updates/second; 260000 incr. resolution
Analog LP filter performance	17 Hz; 60 db/decade
Digital IIR LP filter performance	18-0.25Hz; 40db/decade, selectable in 8 steps
Digital FIR LP filter performance	19.7-2.5Hz, selectable in 8 steps
Averaging period (display output)	600-0.6 updates/second, selectable in 8 steps
General I/O's	
Hardware interfaces	RS485, drives 32 nodes or RS422 -full duplex
Data transmission, rates	9.6; 19.2; 38.4; 57.6; 115.2 kB
Data transmission, protocol	Get results or auto transmit
Logic inputs	2 (10-30 V; 1-3 mA; ref to gnd.)
Logic outputs	2 open collectors (30 Vdc; 0.2 A; ref to gnd.)
Power supply	12-24Vdc max 100mA (12-14 Vdc if R Lc < 300ohm)
Influences	
Temperature effect on Zero	Typical 5 ppm/°K, Max 10ppm/°K
Temperature effect on Span	Typical 2 ppm/°K, Max 5ppm/°K
Temperature range	Operating: -15°C/+55°C; Storage -30°C/+70°C
Relative humidity	0-95 % non condensing
EMC performance	EN61000 Severity level 4-x (all issues)
General I/O protection, all pins	Reversed polarity, excess voltage, burst and surge
Vibration	2.5 G operational; 5 G non-operational
Protection, environment	IP40
Dimensions	
Height /length/width	H 6mm excl. pins; L 81.3mm; W 30.5mm
Weight	27 g (1 oz)
I/O pins	2x5 pins, 2.54 mm pitch; 1x10 pins, 2.54 mm pitch
Standards	
CE EMC directive 2004/22/EC	MID Class E2 (industrial locations) passed
Emission	EN55022/EN55011 Class B
Certificate of approval	Cert.no. DK 0199-R76-10.08
OIML R76 certified accuracy	Class III: 10000e; 0,3 µV/VSI

#### ACCESSORIES

Enclosures: A selection of IP65 plastic enclosures are available for 1; 2 or 4 LDU's.

Extensions: A selection of Unit Adaptors provide screw terminals, fuse protection, DIN TS35 rail mounting, RS232 converters and various operating- and connection facilities.

The Unit Adaptors can be custom made to meet special requirements.



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Phone : **(800) 419 1444** Fax : (413) 525 -6182 sales@group-4.com Dimensions and specifications subject to change without notice

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