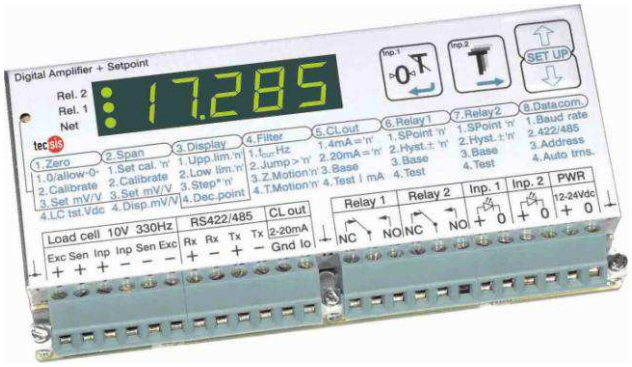
Digital amplifier with display, for dynamic applications

Linearity: 0.002 %
2,400 measurements/second
5-digit LED display



Description

The series EZE30 digital measuring amplifier with LED display is suitable for connecting up to 4 strain gauge load cells with 350Ω.

As standard, it comes equipped with 3 relay outputs, one analogue output, one serial RS-422/485 interface and 3 logic inputs.

The measured values and status of the inputs and outputs is shown on the 5-digit digital display.

The high speed of its A/D converter and high accuracy make it equally suitable for fast, precise force measurements in inspection, control and safety devices and for use in weighing applications.

It can be set up, calibrated and programmed as desired via the keypad without any difficulty.
Tare and zero adjustment can also be performed via the keys.

By virtue of the very extensive ASCII command set, various measured values can be interrogated via the serial interface and also adjustments made to the device.

Features

- Digital strain gauge amplifier with 0.002% linearity
- Very fast with 2,400 measurements/second
- 5-digit digital weight and service display
- Simple operation and calibration via keypad
- 3 limit controls as relay contacts
- Calibration in mV/V possible
- RS-485 or RS-422 interface, bus capability
- Current output 0/4..20mA with 14-bit resolution
- Optionally with large-scale display, driver as standard
- Full bidirectional control via the interface
- 3 digital inputs as keypad or logic control
- EMC tested and CE certified

Applications

- Inspection, control and safety equipment,
- weighing applications

Specific information

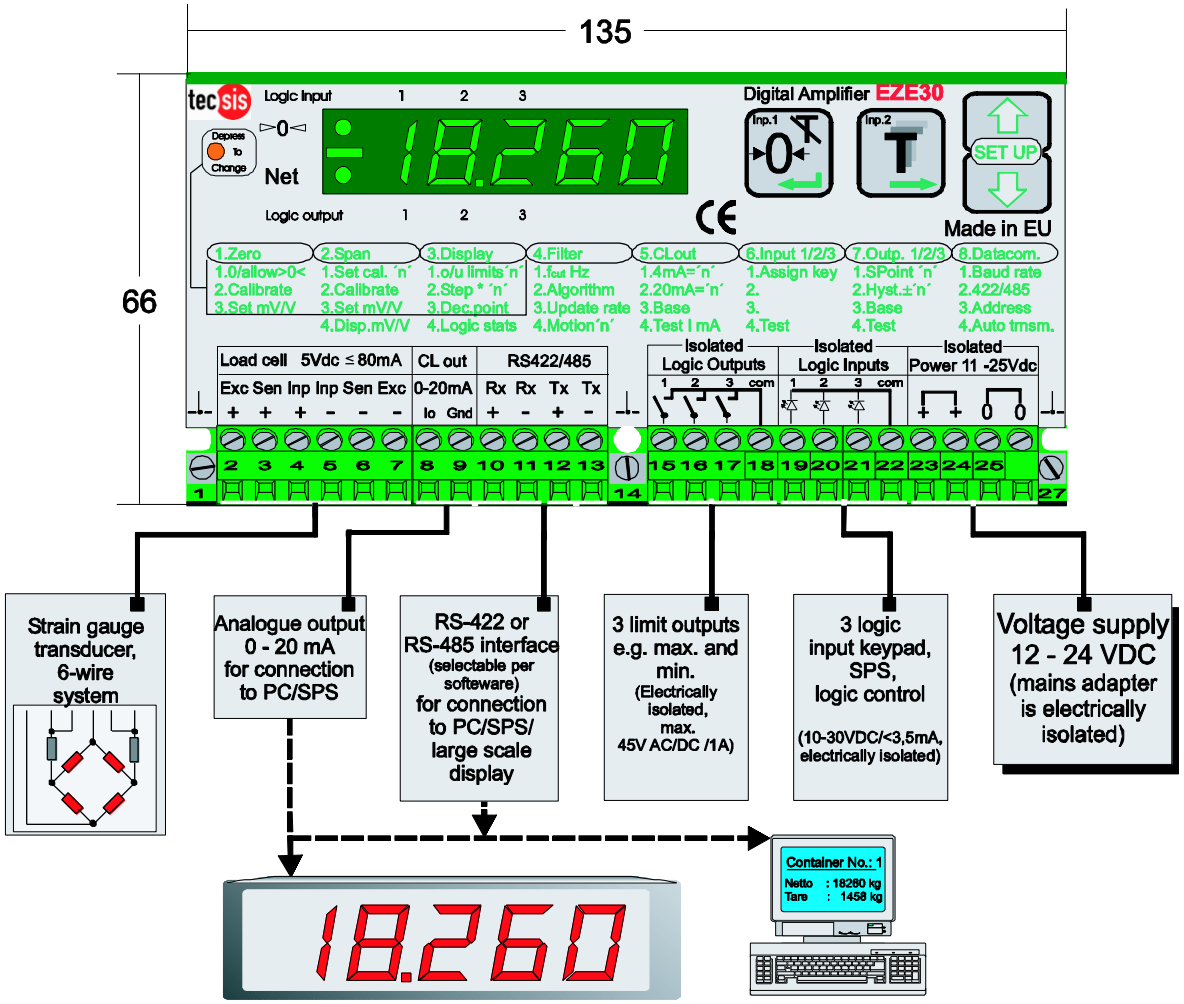
- 3 optically isolated logic inputs, 10…30 V, max. 3.5 mA, for example for external keyboard control
- 3 relay outputs, electrolytically isolated, max. 45 V

Model: EZE30

Technical data

Model	EZE30
Output	
- Signal	RS-485 or RS-422, full duplex, 9600 … 115200 Baud 0…20 mA, 14-bit resolution; freely programmable, gross or net assignment bus capability, addressable from 0...255 for up to 32 devices in the bus system 3 relay outputs, freely programmable; 5-digit LED-display, 10.2 mm and 3 status LEDs;net value, relay 1/2 active
- Accuracy	0.002%
Input	
- Signal	-16…0…16 mV; 6-wire;
- Sensor supply	5 VDC, max. 60 mA
- Resolution	19-bit-A/D-converter output max. +/-99.999 D; up to 2400 measurements/sec. internal
- Limit frequency	Digital filter , adjustable in 8 stages from 0.25…20 Hz
Setting	via software using ASCII-commands; Gross,tare, net, filter, calibration, tara, zero-setting, resolution etc.
Power requirement	10…30 VDC, max. 4 W
- Option	additional board 85…250 VAC, 50/60 Hz, 6 VA
Nominal temperature range	-10 … +40°C
Service temperature range	-10 … +40°C
Storage temperature range	-20 … +50°C
Temperature effect	
- Zero point	0.01% /10 K; Output current 0.04% /10 K
- Measuring span	0.008% /10 K; Output current 0.04% /10 K
Noise emission	acc. to EN 61326
Noise immunity	acc. to EN 61326
Protection type (acc. to EN 60 529/IEC 529)	IP 40 (additional housing IP 65 upon request)
Electrical connection	Screw terminal
Housing	For top hat rails acc. to DIN EN 50 022
- Material	Board with metal housing
- Dimensions (WxHxD)	135 x 19 x 66 mm
Bridge supply	5 VDC, max. 4 strain gauge transducers with 350 Ω, max. cable length 25 metres
Weight	approx. 180 g
Digital inputs	3 optically isolated; 10...30 VDC logic level < 3.5mA, e.g. external keypad control
Limit outputs	3 relay outputs, electrically isolated, max. load 45V ac/dc / 1A
Further available options	Clamping board for connection of 4 load cells, additional board with Profibus module, additional enclosure (IP 65) for panel mounting to DIN 43700

Dimensional drawing



Subject to technical changes