

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

AE 948 c

Technical data

Model			EZE30
Output			
2.04.00	-	Signal	RS-485 or RS-422, full duplex, 9600 115200 Baud 020 mA, 14-bit resolution; freely programmable, gross or net assignment bus capability, addressable from 0255 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		7 loodiday	0.00270
	-	Signal	-16016 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 0.2520 Hz
Setting			via software using ASCII-commands;
Ŭ			Gross,tare, net, filter, calibration, tara, zero-setting, resolution etc.
Power requirement			1030 VDC, max. 4 W
- Option			additional board 85250 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			IP 40
(acc. to EN 60 529/IEC 529)			(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; 1030 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

