

E300F4

Amplifier conditioner converter of signals, analog output

APPLICATIONS

- Acquires very low signals in disturbed areas needing galvanic isolated amplifiers
- Measuring : distortion, pressure, force (gauge sensor)



DESCRIPTION

E300F4 amplifier conditioner can be used twofold:

- strain gauge sensor conditioner
- high precision amplifier for low level voltage

Galvanic isolation gives an excellent common mode rejection.

Gain, filter, sensor supply are set up manually (buttons at the front). Each amplifier has a 220VAC supply.

Technical features

Low drift	0.2mV/°C
Low noise	
Good stability	5ppm
High common mode rejection	
Switchable gain	from 1 to 2000, progression 1-2-5...
Accuracy	0.02%
Output filter	from 1 to 7KHz (7 positions)
Bandwidth	
Bridge balance	0-100KHz
Input/output isolation	counter voltage
Anti short-circuiting output	±500V
Format	
Input features	Camac rack 19" 4U with supply sock at the rear
Switchable at the front	
Stability	
Accuracy	
Linearity	0.02% extrapolation by 10-turn potentiometer
Gain	0.01%
Drift temperature	
According to time	
Zero	
Linear	
Max without damage	
Voltage	
Max voltage	
Common mode	±500V (input / output)
Common mode rejection	
Current	Rd=0ohm DC 160dB 50Hz 140dB
Input current	
Resistance	1nA max
Source resistance	
Differential input resistance	
Capacity	
Capacity	
Noise	
Noise	
Bridge supply	
Wiring	
Possibility to supply with current	2 or 4 wires

Configuration

Voltage supply	
Extrapolation of ranges by 10-turn potentiometer from 1 to 2000, positions: 1-2-5...	
Current supply	
From 0 to 15V DC	
Regulation	By switch (1V not available)
Regulation line	
Regulation charge	0.005% for ±1% DV
Stability	0.02% for 50 to 100% DV
Stability	
Drift	±0.002%/°C
Drift	
Range	From 0 to ±15mV RTI by switch (1mV not available)
Stability	Range extrapolation by 10-turn potentiometer
Stability	
Output features	±0.002%/°C
Configuration	

2 outputs	
Resistance	Filtered output: 2nd order butterworth filter (4th order optional) Non-filtered output
Output resistance	
Voltage	<0.1ohm
Voltage	
Current	±10V mini
Current	
Capacity	±5mA
Loading capacity	
Bandwidth	0.1mF max
Bandwidth	
Control command	Non-filtered. From 0 to 100KHz for -3dB
1 logical status	
Mechanic features	Input/control switch
Weight	
Size	1800g (nominal)
Connector	
Rack	see picture
Dimensions	
Size	Female connector FRB 50 contacts
Configuration	
Receives 8 x E300F4 units	19", 4U
Network connection	
Connectors at the rear	220V single-phase, ±10% 50VA
Standard	
Filtered output	input + bridge: 8-male Jeager connectors (533272)
Non-filtered output	1 x miniature male 27-male Jeager connectors
Control relay command / measuring	1 x miniature male 27-male Jeager connectors
Control input	1x 25-male connectors
Power socket	1x 3-male Jeager connectors

Other configurations on demand

Environment	
Use temperature	
Storage temperature	from 0 to +60°C
	from -55 to +85°C