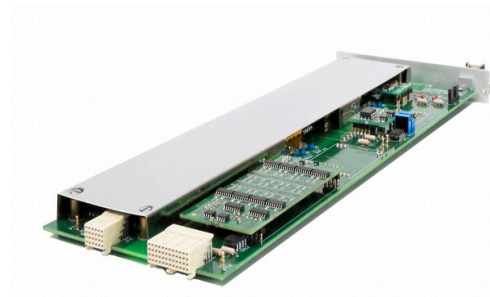


APPLICATIONS

- Acquires very low signals in disturbed areas needing galvanic isolated amplifiers.
- All types of measuring with universal acquisition card: temperature, distortion, pressure, force, acceleration, displacement...



DESCRIPTION

E325 is a very flexible programmable amplifier and easy to adapt for the user, whether material or software wise. E325 acquires all types of sensors. All functions are within the card, without any mechanical setting up: the user has direct access through connectors at the rear. Programming and tuning software (included for Windows) treats all configurations. VISA driver is also available.

TECHNICAL FEATURES

MAIN FEATURES

- Battery saving of RAM configuration setting
- Automatic calibration of the channels
- Modular organization for each channel 16 channels for a 19"3U rack
- IEEE-488 bus and serial link RS-232 programmable

The following functions are available within each card, without any mechanical tuning:

- Filtered and non-filtered output
- High pass/ low cut filter
- Temperature measuring: platinum sensor, thermocouple
- Bridge mounting complements: 1/4, 1/2, 60W, 120W, 350W, 1000W
- Sensor power supply in voltage or current (for strain gauge, piezoresistant sensor, potentiometer...)
- Amplifier for high/ low signal level (gain from 0.1 to 20,000)
- Input / output galvanic isolation $\pm 500V$, with excellent common mode rejection

Amplificateur
Input

Input resistance	100 ohm
Input capacity	500 pF
RMC : Rd = 0 ohm ; DC	160 dB
G=10000 ; Rd=0ohm ; 50Hz	140 dB
G=10000 ; Rd=1ohm ; DC	140 dB
G=10000 ; Rd=1ohm ; 50Hz	120 dB
Input Voltage	± 500V
Input current	± 10V linear rev ±15V without damage ±100V linear rev Att.1/10
Gain	± 1nA
5µV RTI 90 Khz bandiwidth	± 1nA
Range	0.1 to 2000
Accuracy	0,02% gain 1-2-5-..._1000
Extrapolation	Not continuously variable from 0.1 to 20 000
Non Linearity	0,01% of full scale
Stability	0,0025% of full scale

Zero

Thermal Drift	0,1µV/°C RTI
	75µV/°C RTO
Zero adjustment	Self-calibration

Drift

Range	3 automatic ranges ± 20mV, (0,02µV not available) ± 0,2V, (1µV not available) ± 10V, (10µV not available)
Stability	0,005% of full scale

Filters low cut

Type	Butterworth
*Optional	Bessel, Tchebytcheff, elliptic
Nombre de pôle(s)	4th order
*Optional	6th order, 8th order
Increment	10Hz until 2550Hz 400Hz from 2,8Khz to 100Khz

Filtre (high pass: Optional)

Type	Butterworth
Order	4
Optional	6th order, 8th order
Increment	1Hz until 63Hz 50Hz from 100Hz to 3150Hz

Output

Type	Filtered Non-filtered
Optional	250 KHz ($\pm 50V$ isolation)
Output voltage	$\pm 50V$
Output current	$\pm 5mA$

SENSOR SUPPLU (OPPJ OPTION)

Voltage mode

Range	100mV for 15V by 0.25mV steps
Accuracy	$\pm 0.02\%$ of full scale
Stability	$\pm 0.001\%$ with constant temperature over 200 hours
Courant Max	100mV for 5V ; 90mA 5V for 10V ; 50mA 10V for 15V ; 30mA

Current mode

Range	100 μA for 25mA by 0,5 μA steps
Accuracy	$\pm 0.02\%$ of full scale
stability	$\pm 0.001\%/^{\circ}C$

Bridge configuration

Types	$\frac{1}{2}$ - $\frac{1}{4}$ - full bridge of software
Complement value	60ohm – 120ohm – 350ohm – 1Kohm
Bridge reset	
Calibration	± 2048 steps, value from 10 Kohm to 200 Mohm

PLATINIUM SENSOR 100ohm (WITH OPPJ OPTION)

Range	-200°C to +800°C
Low temperature	Programmable from -200 à +800°C
High temperature	Programmable from -200 à +800°C
Slope	10mV/°C for 200V/°C max
Accuracy	0.05% of full scale
Linearization	By software (ON – OFF)

THERMOCOUPLES

J-type	-200°C to +750°C
K-type	-200°C to +1200°C
T-type	-200°C to +400°C
Low temperature	Programmable for -200 à + 800°C
High temperature	Programmable for -200 à + 800°C
Slope	10mV/°C for 200V/°C max
Accuracy	0.05% of full scale
linearization	Table stored in EPROM (ON – OFF)
Linearization speed	16s per rack
Cold junction compensation	By platinum sensor with connector or voltae signal with 100mV/°C slope

MECHANICAL FEATURES

Dimensions	PCB 425 mm X 111.8 mm
	16 x SubD 9pts: input
	2 x SubD 37pts: output

ENVIRONMENT

Use temperature	0°C to 60°C
Storage temperature	-25°C to 85°C
Humidity	Max 55% non-condensable