

DESCRIPTION

The driving and control electronic FB-LA75-space is designed according to space rules. The electronic includes the following sub - systems:

- DC / DC converter
- High voltage regulation
- Linear amplifier
- Strain Gauges conditioner
- Analog controller

It can drive two channels of piezo actuator (-20 / 150 V) and work in open or closed loop with the Strain Gauges and is fully compatible with the piezo mechanisms of CEDRAT TECHNOLOGIES. It can deal with the push pull mode.

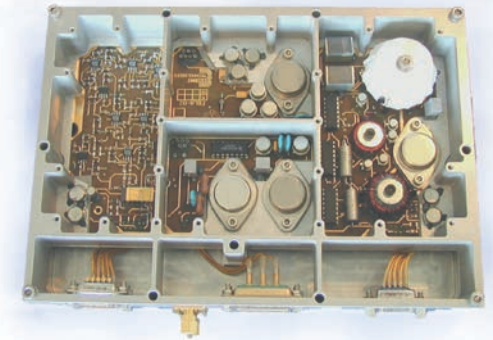


Fig. 1: FB-LA75 space card

REFERENCES	UNIT	FBLA75-X
> Notes x: number of channel (1 to 6)		
Function		DC/DC converter Linear amplifier Strain Gauges conditioner Analog controller
Supply voltage	VDC	18/38
Output voltage	V	-20 ... 150
Maximal output current	A	0,03
Power	W	5,1
Max. output load capacitance	µF	40
Control input voltage	V	-1 ... 7,5
Signal to noise ratio	dB	85
Weight	kg	1,3
Dimensions	mm	220*170*50

SPACE EVALUATION PROGRAM

The FB-LA75-space followed a space evaluation program including:

- Functional tests
- EMC tests
- Thermal vacuum test

SPACE HERITAGE

This electronic is currently used in LISA PATHFINDER - Phase B for the qualification of the proportional cold gas propulsion sub - system.

DC / DC converter

