

Vibration Control System

RL-C21



RL-C21 is a state-of-the-art vibration control system for electro-dynamic shakers. The system is distinguished by simplicity, reliability and high safety standards.

RL-C21 vibration controller has a modular scalable architecture, which allows the user to get from 1 to 32 input channels. The configuration of RL-C21 system is flexible: it is determined by the user and can be modified at any time.

The most innovative techniques of digital signal processing are embedded in the system. The PC is not used in the control loop, all calculations and safety checks are run by a DSP directly in the controller. This feature provides the highest level of shaker protection

Main Parameters

- 4 inputs per controller
- 2 outputs per controller
- Auxiliary logical inputs and outputs
- LCD display
- Scalability from 1 to 32 input and from 1 to 8 output channels

Inputs

Analog channels	1 ÷ 32
ADC resolution, bits	24
Frequency range, Hz	0.1 ÷ 35000
Sensor type	IEPE, TEDS, charge, displacement, velocity, force sensors
Filtration	Analog, digital high-pass and low-pass filters
Voltage range, V	±10
Dynamic range, dB	≥120
Noise level, μV	≤20
Channels crosstalk, dB	≤-100

Outputs

Analog channels	1 ÷ 8 control channels, Up to 8 COLA channels
DAC resolution, bits	24
Frequency range, Hz	0.1 ÷ 35000
Relative error of frequency setting	≤5×10 ⁻⁵
Filtration	Analog, digital high-pass and low-pass filters
Voltage range, V	±10
Dynamic range, dB	≥120

Main Hardware Features

Dimensions, mm	390 × 274 × 54
Weight, kg	2.3
Supply voltage, V	110 ÷ 245
Temperature range, °C	+10 ÷ +30°C

Software Features

- Sine
- Resonance Search and Tracking Dwell
- Random
- Shock
- Sine on Random, Random on Random, Sine and Random on Random, Sine on Sine
- Field Data Replication
- Shock Response Spectrum
- Transient Time History
- Transient Capture
- Data Recording
- Multishaker tests
- Fatigue tests, etc.

Applications

- Vibration tests according to ISTA, ISO, SAE, MIL-STD810H/G, IEEE, etc., in Aerospace, Automotive, Telecom and other industries
- Tests of serial production
- Research and Development
- Fatigue tests

Software



- All software updates are free
- Remote software options activation with a key
- Intuitive and user-friendly interface
- Compatibility with all versions of Windows



«RULA Technologies», SIA

+371-6610-2166

Balta iela 7, Riga, LV-1055, Latvia

contact@rula-tech.com

www.rula-tech.com

