K2+ `New`

The latest vibration controller with enhanced usability and test performance in addition to improved network functions.

The K2+ is the latest vibration controller that has further evolved the usability and test performance of the K2. Network functions have also been enhanced, making it easier to connect to various devices, including personal computers. In addition, it has compatibility with the previous model K2, and test definitions from K2 can be used in K2+. All K2+ hardware and software are developed in-house, and we constantly strive to improve them whilst incorporating the latest technology and customer feedback.

The main test standards stored in the Launcher software (Ver 14.5.0.0 onwards) are as follows as of July 2020. The Launcher software is an option of K2+.

JIS C 60068	Sine, Random, Shock
JIS D 1601	Automotive parts simulated long-life test
JIS E 4031	Railway vehicle parts functional test, Simulated long-life test
JIS Z 0200	Transportation test
JIS Z 0232	Transportation test (Random)
JASO D 014	Automotive parts functional test
ASTM	Transportation test
UN	Lithium-ion battery test recommended by UN
ISO16750	Automotive parts test
ISO12405	Electric vehicle
IEC60068	Sine, Random, Shock
IEC62660	Random, Shock for secondary lithium-ion cells of electric vehicles
ISTA	Transportation test
IEC61373	Railway vehicle parts functional test
ISO13355	Transportation test (Random)
ISO4180	Transportation test
ISO19453	Electric vehicle parts

Specifications

Main Enclosure	
Number of Slots	3
AC Power	Single-phase AC, 100 V-240 V (auto-selected)
External Communication	Contact I/O (for emergency stop)
Ambient Conditions	0-40°C, below 85%RH, non-condensing
Dimensions	W430 × H100 × D383 mm (not including the projection parts)
Mass	Approximately 7.0 kg

		4-channel Input and 4-channel Output Module (standard)	8-channel Input Module (option)
Input Section	Number of Channels	4	8
	Input Connector	BNC	
	Input Signal	Charge, Voltage (Single-ended/Differential), IEPE	
	Charge Amplifier Sensitivity	1.0 mV/pC or 10 mV/pC	
	Charge Amplifier Cut-off	0.32 Hz	
	Maximum Input — Charge Input	±10000 pC or ±1000 pC	
	Maximum Input — Voltage Input	±10000 mV	
	Maximum Input — IEPE input	±10000 mV	
	Sampling Frequency	102.4 kHz maximum	
	Voltage Input Coupling	AC or DC	
	AC Coupling Cut-off	0.1 Hz	
	CCLD Amplifier (IEPE)	+24 VDC, 3.5 mA	
	TEDS (IEPE)	Version 0.9, Version 1.0	
	D/A Converter — Type	ΔΣ	
	D/A Converter — Resolution	32 bit	
	D/A Converter — Dynamic range	121 dB	
	D/A Converter — Digital filter	Pass-band ripple: +0.001, -0.06 dB, Stop-band attenuation: 85 dB	

Output Section	Number of Channels		4 (One channel is reserved for drive output)	-
	Output Connector		BNC	
	Output Signal		Voltage	
	Maximum Output		±10000 mV	
	Sampling Frequency		102.4 kHz maximum	
	D/A Converter	Type	ΔΣ	
		Resolution	32 bit	
		Dynamic range	120 dB	
		Digital filter	Pass-band ripple: ±0.005 dB Stop-band attenuation: 100 dB	

Minimum Specifications for PC

- One LAN port Gigabyte ethernet port and Gigabyte ethernet cable
- Microsoft Windows 10 Pro (64 bit) or Windows 10 IoT Enterprise (64 bit)*.
- Memory required (for 8 input channels)
  4 GB or more
- DVD-ROM Drive (required for installation)
- One USB port (necessary for protect device)
- Resolution of monitor and PC required 1280 x 1024 or more

* Recommended OS and memory vary depending on software, options,number of I/O channels, etc.