DIV-503A

On-vehicle High Voltage Data Logger for Crash Test



This logger has 980.7 m/s² (100 G) impact resistant, and safely measure the high voltage signals such as those of batteries used in electric and hybrid vehicles.

- ●Measurement range ±500 VDC/±250 VDC
- •Measuring time about 62 s at 20 kHz sampling, and about 8 h at 100 Hz in PC acquisition mode.
- Real-time measurement possible (Sampling frequency 100 Hz or less)
- ●Frequency response: DC to 1 kHz
- •Measurement: 3 channels
- Max sampling frequency 20 kHz
- ●Equipped input level display LED
- ●Use of 100BASE-TX for high-speed data transmission

Being isolated between input channels, this data logger safely measure the high voltage signals of batteries used in electric and hybrid vehicles during crash tests. There are two measurement methods. One is data access in DIV mode (Max 20 kHz sampling) that records data in the logger which is collected after testing, and the other is PC acquisition mode (Max 100 Hz sampling) that transmits and saves data on a connected PC in real time. This means that data access in DIV mode to be used during crash tests, and PC acquisition mode to be used during voltage monitoring and other preparations.

Total specifications

Triggers	No voltage contact or TTL signals
Interfaces	10BASE-T, 100BASE-TX
Impact Resistant	980.7 m ² (100 G) 10 ms half sine
	X, Y, Z axis directions: each 1000 times
Withstand Voltage	1000 Vrms (Leakage current 100 μA or less)
	(Between each input, input-case, input-output)
Operating Temperature	0 to 50°C
Operating Humidity	20 to 80%RH (Non-condensing)
Built-in Batteries	Type: Nickel hydride
	Recharge time: Approx. 3.5 h
	Operating time: Approx. 30 min
Power Supply	11 to 15 VDC
	Consumption current: 2.0 A or less
Weight	Approx. 2.5 kg

Insulated section specifications

Channels	3
Input Signals	Voltage
Input Range	Automatic selection using the provided cable
	±500 VDC or 250 VDC
	(Safe input Max. 1 k V)
Input Impedance	10 +10 ΜΩ

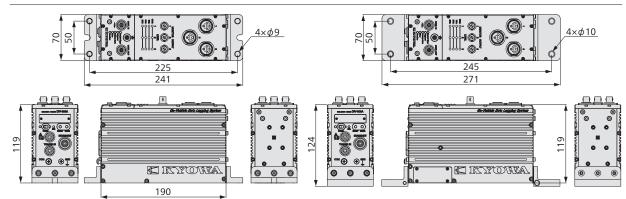
AD transducer specifications

Resolution	16 bits
Sampling	Simultaneous sampling of all channels
Measuring Modes	Data access in the DIV mode
	Data stored internally, data collection after testing
	PC data acquisition mode
	Direct transfer of data to PC
Sampling	Data access in the DIV mode
Frequencies	1, 2, 5, 10, 20, 50, 100, 200, 500,
	1 k, 2 k, 5 k, 10 k, and 20 k Hz
	PC data acquisition mode
	1, 2, 5, 10, 20, 50, 100 Hz

Control software specifications

OS	Windows Vista, 7 (32-bit, 64-bit)
Interfaces	10BASE-T, 100BASE-TX
Settings Functions	Sampling frequency, measuring mode
	and channel name
Display Functions	Time series graph

Dimensions



DIV-503A-V (Longitudinal connection)

DIV-503A-H (Transverse connection)