

DIS-7000 Series

On-vehicle Data Logger for Crash Test



On-vehicle system for acquisition strain and voltage signals

- Compact & lightweight: 168 channels in 290W 100H 210D mm, approx. 9 kg
- High impact resistant: 100G
- Modularization structure enables to optimize your system
- Synchronous measuring channels up to 1056 (Up to 999 channels when using DIS-70A)

DIS-7000A is the Control Module for controlling Sensor Input Modules.

DIS-724A is the Sensor Input Module for measuring strain and voltage signals. 24 channels per unit.

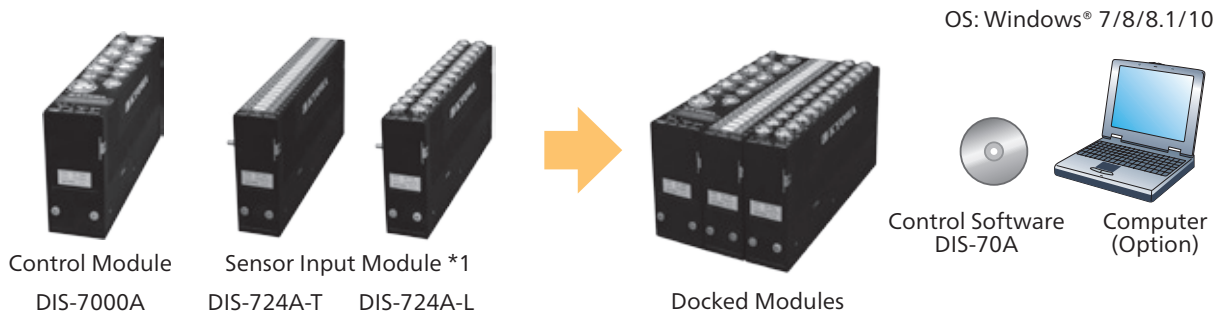
Specifications (DIS-7000A, DIS-724A)

■ Analog Input	
Measuring Targets	Strain, voltage
Input Channels	24 (One DIS-724A module)
Input Connectors	DIS-724A-L: ECG.1B.307 DIS-724A-T: 3RT01-RW7F
Input Formats	Balance differential input
Input Resistance	Bridge sensor : Approx. (50 + 50 MΩ) Voltage: Approx. (100 + 100 kΩ)
Input Voltage	Within ±20 V
Gain	×0.1 to 0.9 (×0.1 step), ×1 to 5000 (×1 step)
Gain Accuracy	Within ±0.2% FS
Nonlinearity	Within ±0.1% FS
Balance Adjustment	Gain ×0.1 to 0.9: ±20 V, ×1 to 9: ±2 V, ×10 to 99: ±200 mV, ×100 to 5000: ±20 mV
Bridge Excitation	10, 5, and 2 VDC, each channel ON/OFF is switchable, for 120 Ω to 5 kΩ half bridge and full bridge systems
■ Filters	
Cutoff Frequencies	50, 100, 200, 400, 1k, 2k, 4k, 10k, 20k Hz
Amplitude Ratio	-3 ±1 dB, at cutoff point
Attenuation	(-30 ±3) dB/oct.
■ A/D Converters	
Sampling Frequencies	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k Hz

■ Data Recording	80 mins in flash memory, at 100 kHz sampling
■ Triggers and Synchronization	
	Trigger synchronization of multiple models is available.
Switch Triggers	2, no-voltage contact isolated input
Cascade Triggers	Operated by triggers from other modules
Software Triggers	Operated by commands issued from the PC
Analog Triggers	Operated by level of arbitrary 3 channels
■ TEDS Functions	
	Compatible with IEEE1451.4 (Mixed Mode Transducer Interface Class 2)
■ Digital Input	
Input Channels	32 (2x16), No-voltage contact
■ Interfaces	
	Conforming to 10BASE-T/100BASE-TX
■ Indicators/Buzzers	
LED	Indicate status about every module
LED Indicators	Displays status about every module in 8 alphanumeric characters.
Buzzers	Built-in alarm buzzer
■ Check Functions	
	Sensor check, input-resistance check, burn-out check, gain check, excitation check, memory check, battery check, trigger check
■ Power Supply	
	15 to 28 VDC, typical 24 VDC
■ Built-in Batteries	
Types	Li-ion battery in every module
Continuous Operation	Approx. 30 mins
■ Operating Environment	
Operating Temperature	0 to 50°C
Operating humidity	20 to 80%RH (Non-condensing)
Storage Temperature	-10 to 60°C
Storage Humidity	10 to 90% RH (Non-condensing)
Impact Resistant	980.7 m/s ² (100 G), 10 ms half sine, X- Y- Z-axis directions, each 1000 times
Vibration Resistant	29.4 m/s ² (3 G), 5 to 200 Hz (While operating), X- Y- Z-axis directions, each 10 minutes
■ Appearance	
Dimensions	DIS-7000A: 45 W × 100 H × 210 D mm
(Excluding protrusions)	DIS-724A-L/-T: 35 W × 100 H × 210 D mm
Weight	Approx. 1.1 kg for every module



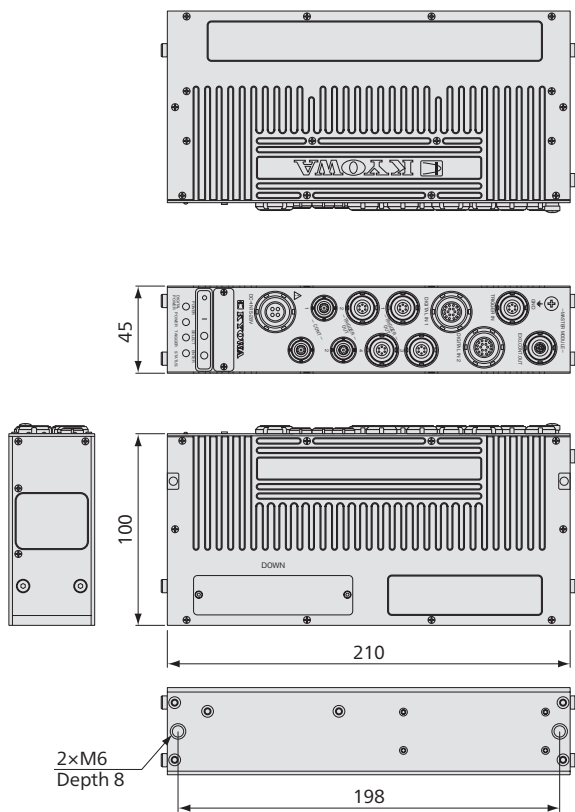
■ System example



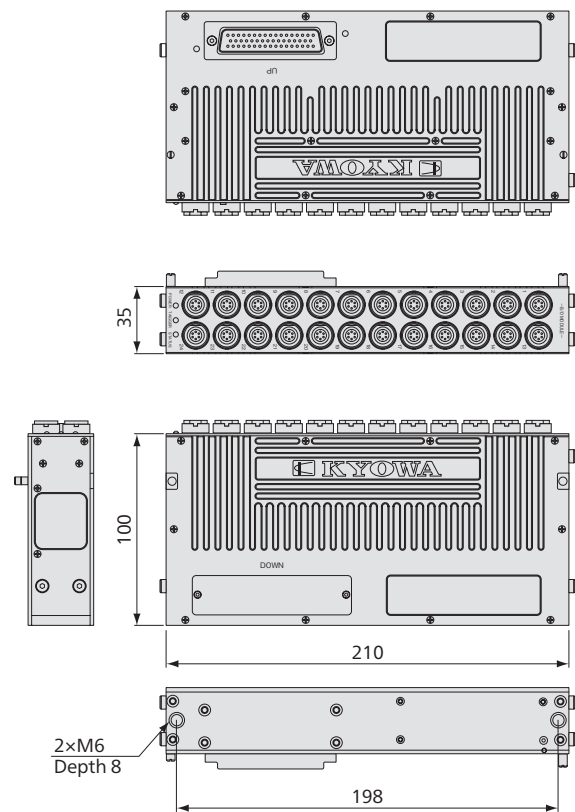
Note 1: Up to 15 units are docked.

■ Dimensions

Control Module
DIS-7000A



Sensor Input Module
DIS-724A-L *2



Note 2: DIS-724A-T is the same in size, but difference in input connectors.

