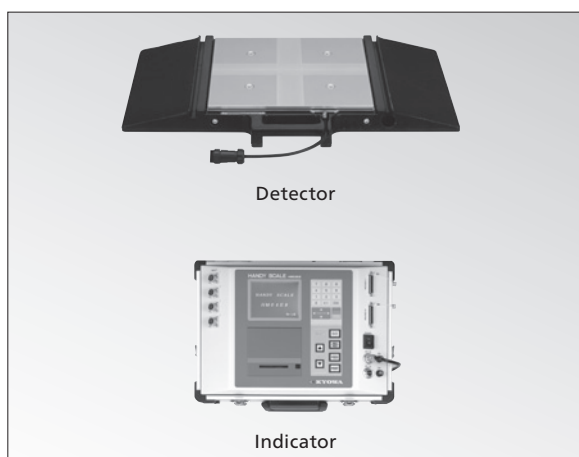


HS Series

"Handy Scale" Portable Weighing Systems



High-stability measurement easily

Features of Detector

- Unique aluminum integrated structure for minimal eccentric error
- Wide platform for easy measurement with low-profile tire
- Rubber frame for easy landing
- Integrated cable protects connector against damage due to wheel movement
- Diaphragm on both sides improves drip and moisture proof

Features of Indicator

- Contrast-adjustable LCD screen imaging tire positions
- Operates on 100 to 240 VAC, no switchover required. Operation on 12 VDC possible with optional battery pack
- 4-channel HM04E8 provides 3 display modes of "individual wheel load," "axle load" and "%." 8-channel HM08E9 provides 2 display modes of "wheel load" and "axle load." They are selectable with the cursor key.
- Car No. is input and printed with the built-in printer.
- RS-232C interface
- Functions, such as a "indicated-value stable mark" and a "acceleration-due-to-gravity compensation function", are substantial.

The "Handy Scale" portable weighing system has been favorably used by automobile-related customers in Japan and abroad. The system enables easy and stable measurement of individual wheel loads, individual axle loads, subtotals of front/rear and left/right wheel and axle loads and the total, which are indispensable for weighing trucks.

Models and specifications

Models	Rated Capacity	Maximum Wheel Load	Minimum Graduation	System* Accuracy
HS1001NX4E8	4 t	1000 kg	1 kg	±0.2%
HS1002NAX4E8	8 t	2000 kg	2 kg	
HS1003NAX4E8	12 t	3000 kg	2 kg	
HS1005NX4E8	20 t	5000 kg	5 kg	

*System accuracy is when used at 25±10°C.

System components

Models	Detector	Indicator	Connection Cable
HS1001NX4E8	HS1001-N	HM04E8	HW005-40AD
HS1002NAX4E8	HS1002-NA		
HS1003NAX4E8	HS1003-NA		
HS1005NX4E8	HS1005-N		

Specifications of Detector

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.1% RO
Hysteresis	Within ±0.1% RO
Repeatability	0.1% RO or less
Rated Output	Approx. 1.0 mV/V (2000 × 10 ⁻⁶ strain) HS1002-NA: Approx. 0.7 mV/V (1400 × 10 ⁻⁶ strain)

Environmental Characteristics

Safe Temperature	-20 to 70°C (Non-condensing)
Compensated Temperature	-10 to 60°C (Non-condensing)
Temperature Effect on Zero	Within ±0.01% RO/°C
Temperature Effect on Output	Within ±0.01%/°C

Electrical Characteristics

Safe Excitation	20 VDC
Recommended Excitation	1 to 10 VDC
Input Resistance	395 ±5 Ω
Output Resistance	350 ±5 Ω
Cable	4-conductor (0.3 mm ²) shielded chloroprene cable, 6 mm diameter by 20 cm long (25 cm long with HS1005-N), terminated with a connector plug NJW-207-AdF6 (Shield wire is connected to the case.)

Mechanical Properties

Safe Overloads	120%
Weight	See table below. (Including cable)
Degree of Protection	IP63 (IEC 60529)
	[Note] IP63 is not permanent. Waterproof performance could be decreased depending on the usage environment.

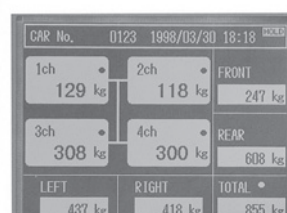
Specifications of Indicator

Number of Channels	See table below.
Display Contents	See table below.
Number of Display Digits	5 for each individual load 6 for total load
Display	LCD
Operating Temperature	-10 to 40°C
Accuracy	Within ±0.03% FS
Printer	5×7, dot impact printer
Power Supply	100 to 240 VAC or 10 to 18 VDC
	Power consumption
	20 VA (Regular)
	30 VA (When the printer is operating)
	External battery pack is available. (Model: BATKIT)
	Power supply: 12 VDC
Weight	Approx. 7 kg
Interface	RS-232C

Standard Accessories AC power cable (3 m), printer paper, ink ribbon

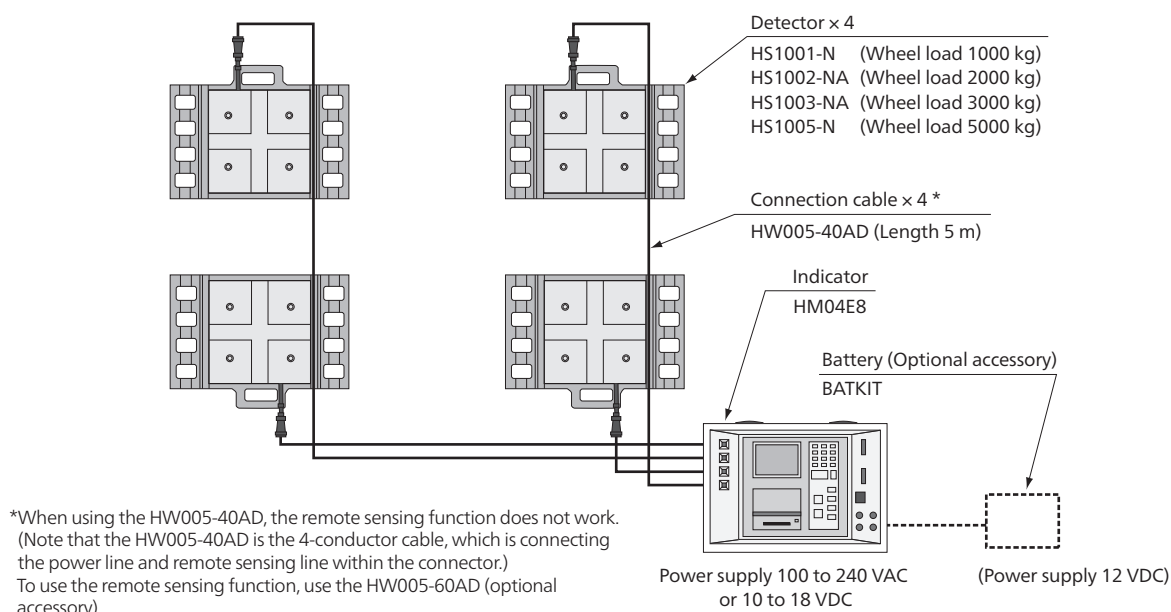
Models	Number of Channels	Display Contents
HM04E8	4	Wheel load, axle load, left & right, total weight, ratio%, cross%
HM08E9	6, 8 switchable	Wheel load, axle load, left & right, total weight

*Be sure to use the remote sensing cables for the indicators.

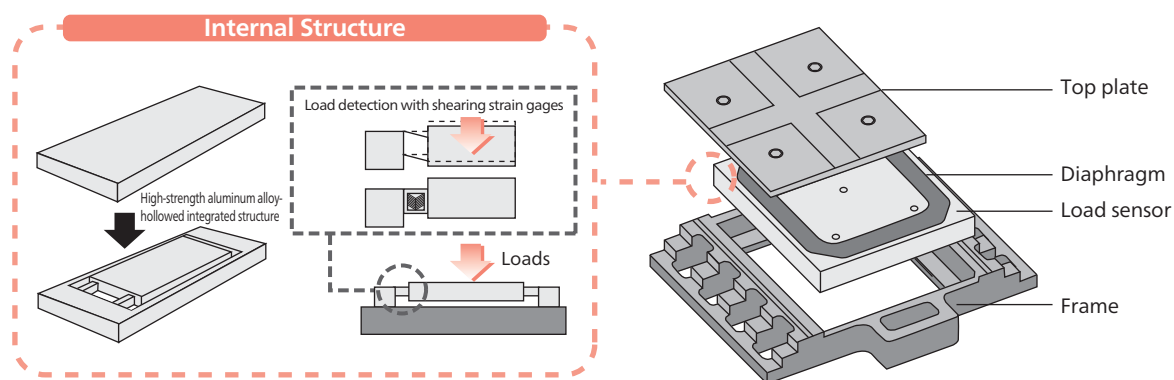


Example of
4-ch display
(axle load)
HM04E8

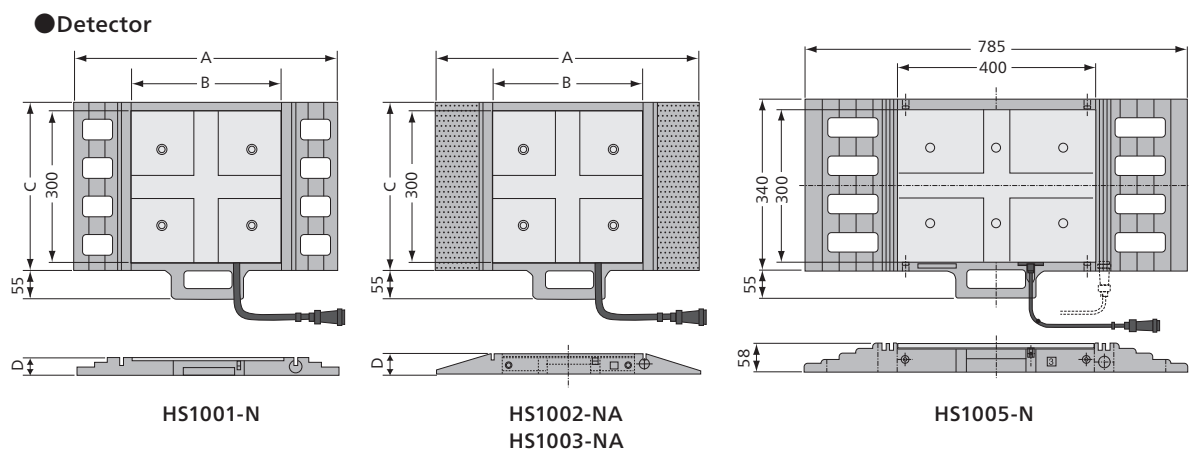
Block diagram



Internal Structure



Dimensions



Models	Rated Capacity	A	B	C	D	Weight* (Approx.)
HS1001-N	1000 kg	520	300	330	33	8 kg
HS1002-NA	2000 kg	605			43	11 kg
HS1003-NA	3000 kg					20 kg
HS1005-N	5000 kg					

*Including cable

