

DKA series

Desktop force amplifiers (with Output)



DKA-01



DKA-02

[Applications]

- Combining with various load cells, the amplifiers can measure minute to large force.
- The amplifiers can be set up for up to 4 load cells according to applications. Hence, they are most suited for measuring force on a production line. (A changeover switch is installed inside the unit.)
 - Shorten an outage time of a conveyor line for replacing a broken sensor.
 - Shorten a setup time of load cell replacement for changing the objects measured or the equipment types employed.
 - Product discrimination by the acceptance and rejection criterion signal (DKA-02)

[Feature]

- The amplifiers can hold settings for up to 4 load cells according to applications.
- The peak-hold function (holding the maximum torque measured) is installed for all models as a standard feature.
- Measuring units are selectable from among Kg, N, and lb.
- Product discrimination (LED display & signal output) is possible by the comparator function which sets the upper/lower limits for measuring. (DKA-02)

[DKA series specifications]

Model	DKA-01	DKA-02
Measuring units	kgf / N / lb (Selectable)	
Display features	Real-time and peak-hold mode (Selectable)	
Display	4 digits LCD, Units, Mode	
Measurement time	20 times / second	
Display update	20 times / second	
Maximum load	Refer to sensor specification (It displays up to 110 % of the rated load.)	
A/D converter	16bit delta sigma system	
CPU	8 bit one-chip microprocessor	
Accuracy	+/- 0.2 % of F.S. with DPU load cell Note 1)	
Operating temperature range	0 to +40 degree Celsius	
Dimension	W270×D220×H108 mm	W320×D230×H153 mm
Power supply	AC100V to 220V	
Weight	1.5kg	3kg
Output	Digital (RS232C) Mitutoyo Digimatic Analog (Approx. +/- 2 V F.S.)	
External connecting switch	Mode select / Unit select / Zero clear	
Comparator function	×	LED indicator display +NG / OK / -NG signal output
Accessory	-Power cable Note 2) -Spare fuse	

Note 1)

Please order Imada's load cell (refer to its catalog) with the amplifier so that their combined calibration can be done when they are shipped.

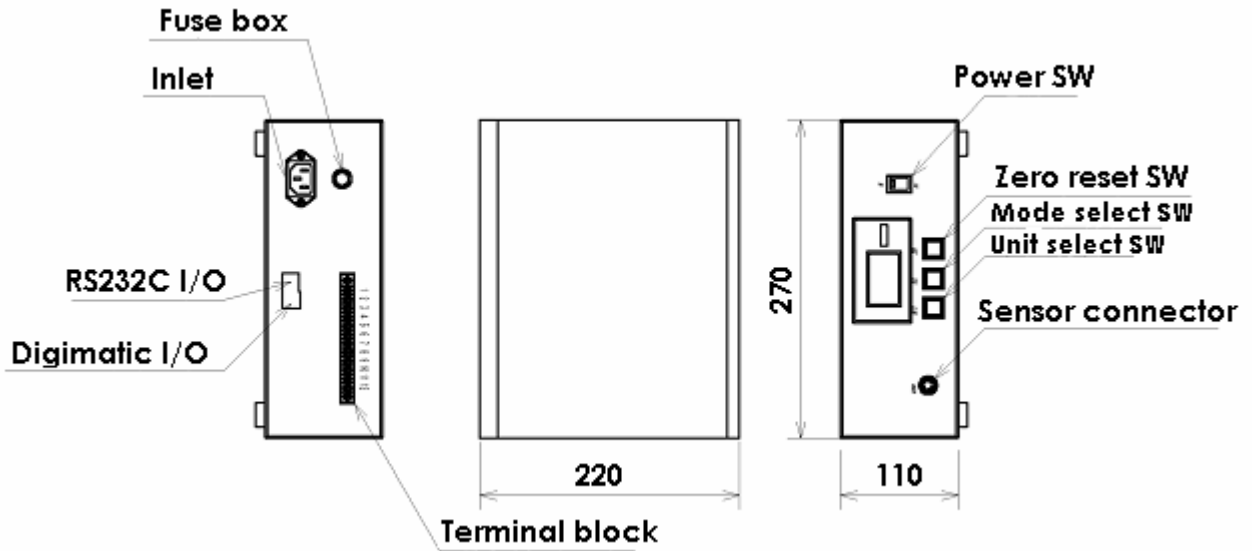
The accuracy differs according to the models of load cell.

Note 2)

Commercial power voltage and plug shape vary in the area where it is used. Please specify the confirmed commercial voltage and the plug shape when placing an order.

[Dimension]

DKA-01

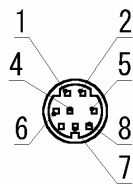


RS232C I/O specification

No	Input/output signal
1	Signal GND
2	Signal TXD
3	Analog OUT
4	Not used
5	Signal RXD
6	Analog GND
7	Not used
8	Not used

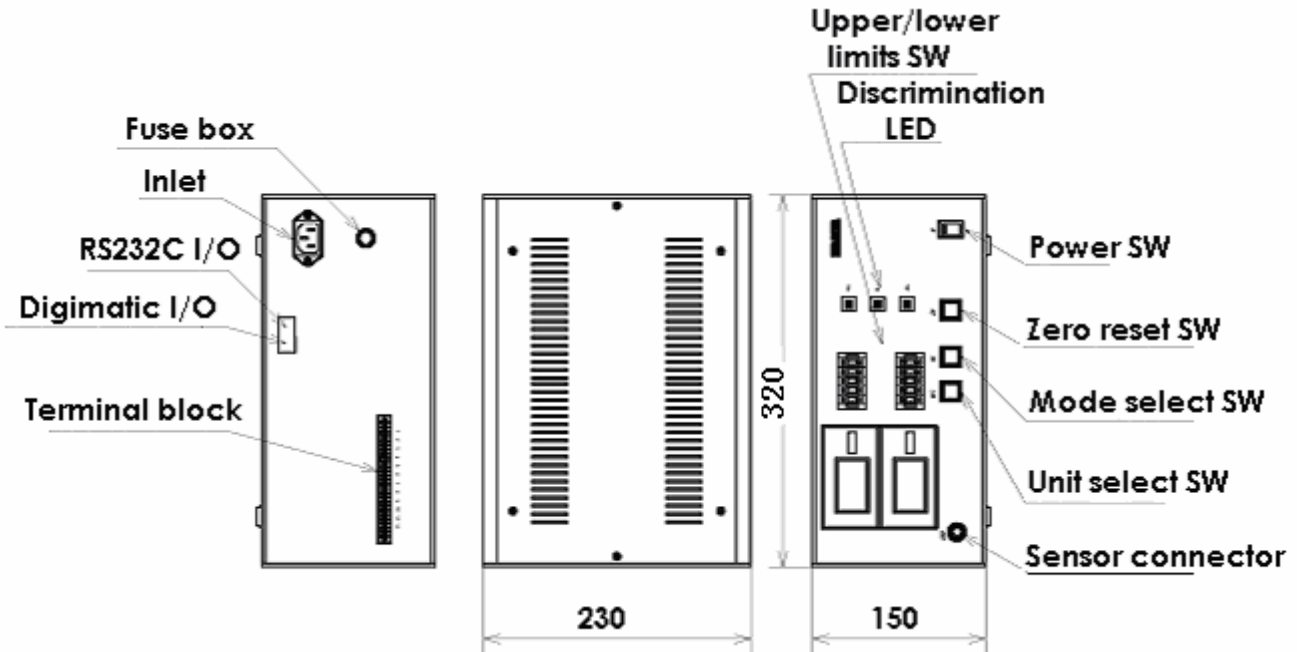
Input/output layout at terminal block

No	Input/output signal
1	Not used
2	Not used
3	Not used
4	Not used
5	External unit select (UNIT)
6	External unit select COM
7	External mode select (PEAK)
8	External mode select COM
9	External zero reset (ZERO)
10	External zero reset COM
11	Not used
12	Not used



RS232C I/O

DKA-02

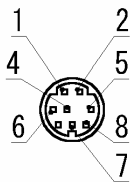


RS232C I/O specification

No	Input/output signal
1	Signal GND
2	Signal TXD
3	Analog OUT
4	Not used
5	Signal RXD
6	Analog GND
7	Not used
8	Not used

Input/output layout at terminal block

No	Input/output signal
1	Output COM (DC24V)
2	+ NG output (DC24V)
3	OK output (DC24V)
4	- NG output (DC24V)
5	External UNIT input (0V)
6	External PEAK input (0V)
7	External ZERO input (0V)
8	For external input (DC24V input)
9	Not used
10	Not used
11	Not used
12	Not used



RS232C I/O

[Note]

- Load cells are sold separately. Select load cells from a wide range of Imada's load cells.
- Do not use the amplifiers in the condition of rapid temperature changes, high temperature, high humidity, near water and dusty place.
- All information is subject to change without prior notice.