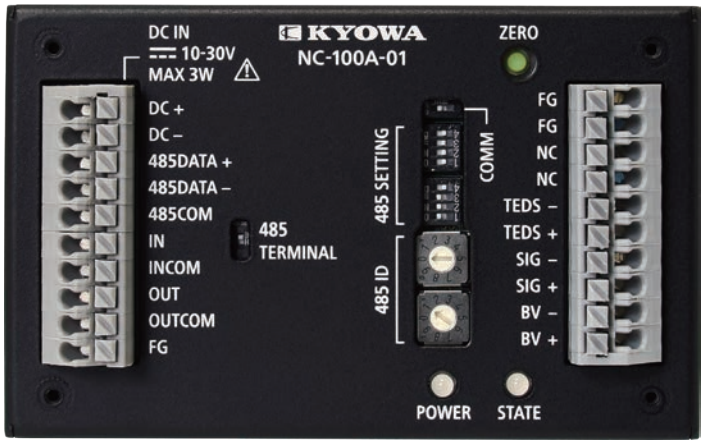
KYOWA

NC-100A

Digital Conversion Unit



NC-100A Features



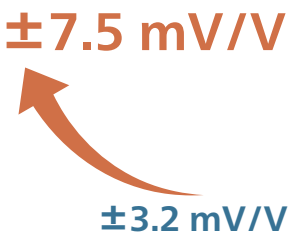
Roughly actual size
57.4 W × 92.0 D mm (Excluding protrusions)

Installed Close to the Sensor

NC-100A convert the output of strain gage sensors into digital signals. The business-card-sized, lightweight design allows for flexible installation in confined spaces, even in close to sensors. Operations and wiring work can be done from the front panel, allowing it to be installed and configured in narrow spaces.

Wide Input Range

It provides an input range roughly two times wider at ±7.5 mV/V (in-house comparison). It can be used with sensors requiring a wider input range, such as displacement sensors (transducers).

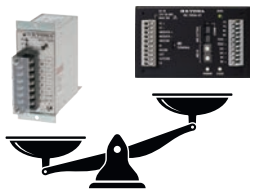


Convert Signals to Digital

Installed close to a sensor, it can convert analog signals from a strain gage sensor to RS-485 or CAN output*. This can effectively reduce wiring and the effect of noise, compared with analog transmission.
*NC-100A-10 only

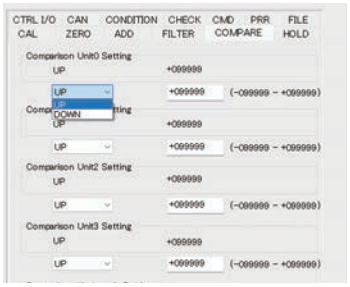
Lightweight

It is significantly lighter than analog output amplifiers*.
*WGA-100B



Comparison Function

Four comparators can be configured. The upper limit and lower limit of each comparator can be set freely.



Setting software

Hold Function

It supports 10 different hold functions.

- Arbitrary point
- Time specification
- Peak
- Peak to peak
- Bottom
- Interval definition

etc.

Calibration Function

Multiple Calibration Modes: Actual Load, Sensitivity, Numeric, and TEDS. Save time with TEDS-no manual coefficient entry required.



TEDS-compatible sensor

TEDS



Calibration coefficient, etc.

Applications

PLC Integration (NC-100A-01)

Supports configuration, control, and monitoring via RS-485, enabling easy integration with PLCs. It also supports control input/output and can be used as an instrumentation amplifier, such as connecting it to a warning light.



DIN rail connection example



Recording with a CAN logger (NC-100A-10)

It can be installed in narrow spaces inside vehicles to convert signals from sensors used during driving tests, such as pedal force transducers, into CAN output. These can be recorded with a CAN logger, allowing on-board network information to be centrally managed.

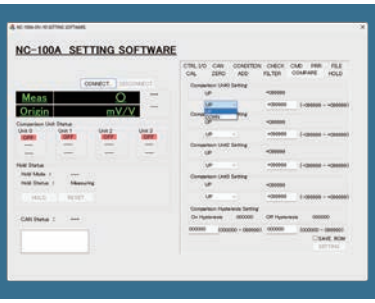


System Configuration Example



Setting Software

In addition to configuration, it can also display numerical data and export CAN dB files.



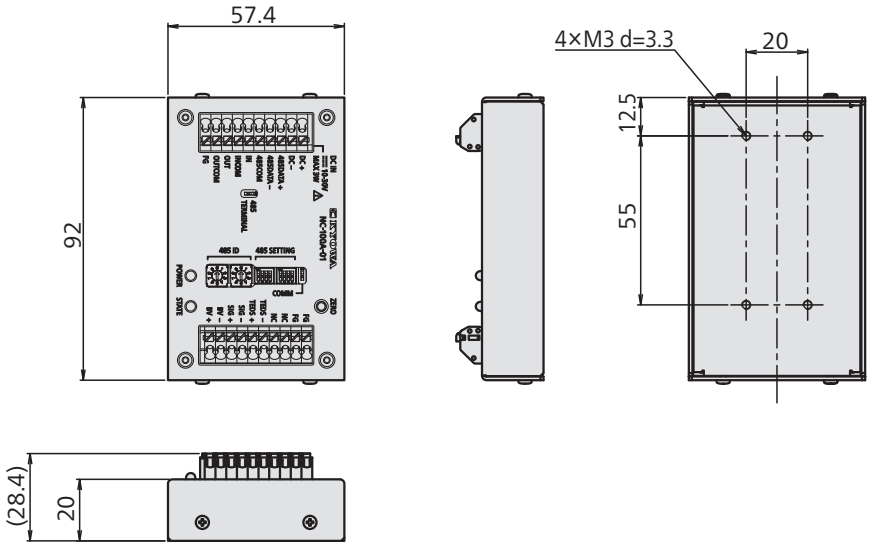
*Cables are optional accessories. Please contact us for details.
*Control commands are publicly available.
*The setting software can be downloaded from our website.

Main Specifications

Model	NC-100A-01	NC-100A-10
Communication Interface	RS-485	RS-485, CAN（Output only）
Control IO	each 1	-
Channels	1	
Terminal Block	One-touch type terminal	
Measuring Targets	Strain-gage transducers (Bridge excitation: 5 VDC, TEDS compatible)	
Measuring Range	±7.5 mV/V (Input range including zero adjustment range)	
Frequency Response	DC to 200 Hz (±1 dB)	
Sampling Speed	2404 times/s	
Comparator	4 (Upper and lower limits are arbitrary)	
Power Supply	10 to 30 VDC, 3 W or less (24 VDC, 350 Ω load)	
Operating Temperature	-20 to 60°C	
Operating Humidity	20 to 80% (Non-condensing)	
Weight	Approx. 100 g	

Scan this for details

Dimensions (NC-100A-01)



KYOWA ELECTRONIC INSTRUMENTS CO., LTD.

Global Sales Department:
3-5-1, Chofugaoka, Chofu, Tokyo 182-8520 Japan
TEL: +81-42-489-7220 FAX: +81-42-488-1122
E-mail: support-en@kyowa-ei.co.jp
Website: www.kyowa-ei.com

⚠ Safety Precautions

Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

■ Specifications and designs are subject to change without notice.
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■ All dimensional drawings use "millimeters" as the standard unit.
"mm" has been omitted for convenience.

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