



TD-01 PORTABLE
24-bit/1kHz A/D conversion, Portable Digital Indicator

For multiple applications, it's easy to check anywhere!



- Waveform display!
- Bar meter display!
- Recording & listing of indicator values!





24-bit/1kHz A/D conversion Portable Digital Indicator **TD-01 Portable**

TD-01 Portable is a digital indicator that connects with strain gauge based transducers. This unit displays input signals from transducers as an indicator value or graph display and features: Great visibility with color graphic LCD, high-speed processing A/D converter, indicator recording, interrupt check and support for TEDS. The TD-01 is wonderfully portable and equipped to be highly functional with excellent cost-effectiveness.

A variety of advanced functions are combined in one compact unit!

High-performance color graphic LCD screen

- The 2.4" color TFT LCD provides great visibility and a variety of information.
- Color changes indicate different alarm conditions.



Waveform & bar meter display function

- Graphical chart allow users to check input signals.



TEDS function (Automatic calibration)

- TEDS function reads the calibration information automatically and records calibration values when the power is turned on.
- Sensor information can be displayed and rewritten.



Indicator value list

- This function can display a list of recorded indicator values.
- Waveform screen can be recorded, displayed and compared.



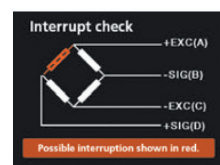
Static Strain Disp. Mode

- Shows the input signal in micro strain units.
- This function makes it easier to check load-cells for plastic deformation.



Interrupt Check

- Lead disconnect is immediately revealed on the screen.
- Lead interruption is detected and the location of the possible disconnection will be shown in red.



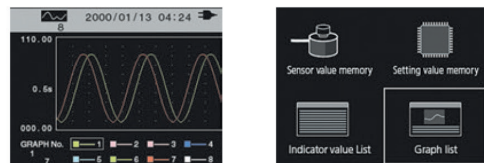
Dual Input

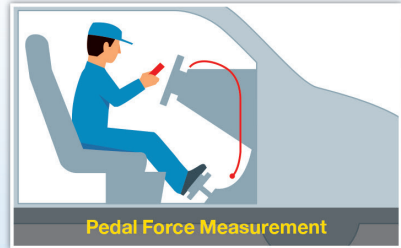
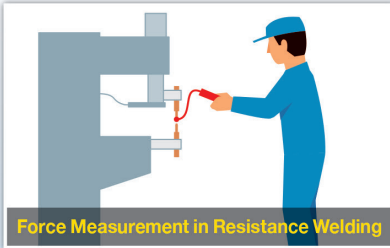
- Round connector (NDIS7P)
- Connecting with the terminal bank



Compare Readings

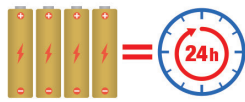
- Record up to 8 different readings for up to 30 sec.
- Select and overlay readings for easy comparisons.





Multiple power supply system

- Continuous operation time on four AA batteries power is approximately 24 hours (when the Premium alkaline batteries are used).
- USB bus power can enable the unit to drive for many hours continuously.



※ EVOLTA batteries "EVOLTA" is a registered trademark of Panasonic Corporation.



D/A output

- The analog output corresponds to the unit indicator value as voltage output of up to $\pm 2V$.
- Use this unit as a dynamic strain amplifier.



Data management software TdDataPicker

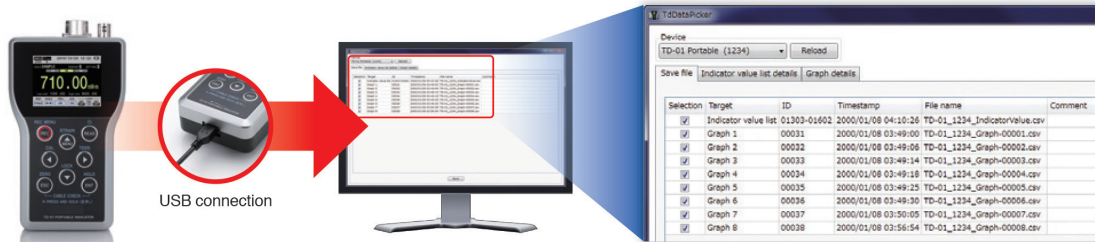
"TdDataPicker" is the data management software and is included with each TD-01 Portable.

"TdDataPicker" allows you to store recorded data in CSV format and shows saved indicator values and graph data by a simple operation.

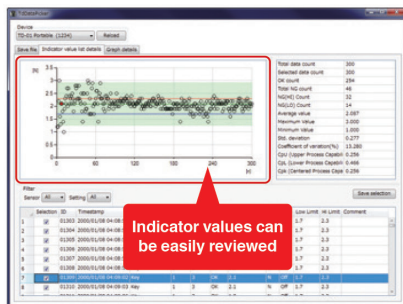
*This software can be downloaded from "TD-01 Portable" product page (<http://loadcell.jp/en/products/td-01/>). Download service requires member registration.

File storage

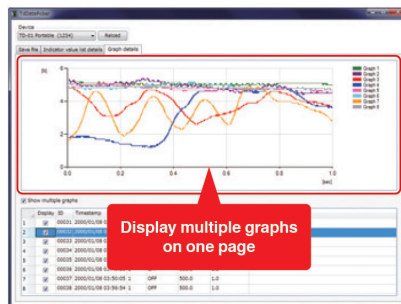
This software can save data recorded in the TD-01 to a computer as CSV format files.



Indicator value list details screen



Graph list details screen



System requirements

Recommended PC spec

Processor equalling or surpassing an Intel Core 2 Duo Computer with 1Gb or more memory

OS supported

Windows 7/ Windows 8.1/ Windows 10 (both 32bit OS and 64bit OS)



Specifications

Compatible sensors		Strain gauge transducer
Signal input terminals		Round connector(NDIS7P)/terminal bank(connect only one at a time)
Excitation Voltage		DC, 2.5 V \pm 5% (30mA maximum current)
Signal input range		\pm 5 mV/V
D/A output		\pm 2 V
Equivalent input/TEDS	Calibration range	0.3 mV/V – 5.0 mV/V
	Calibration precision	Within 0.1% F.S. (when using a 1m standard TEAC Φ 8, 6-core shielded cable with 350 Ω impedance, when 5mV/V)
Precision	Nonlinearity	Within 0.01% F.S. + 1 digit (when 5mV/V)
	Zero drift	Within 0.5 μ V/ $^{\circ}$ C (input conversion value)
	Gain drift	0.005%/ $^{\circ}$ C or less
A/D conversion		1000 times/second, 24-bit
Digital filter		Moving average (select from OFF, 16, 32, 64, 128, 256, 512, 1024, 2048)
D/A output	Output connector	BNC
	Output voltage	\pm 2.0 V
	Resolution	70.16 μ V typ
	Nonlinearity	0.02% F.S. or less
	Zero drift	0.1 mV/ $^{\circ}$ C or less
TEDS function	IEEE1451.4 class 2 mix mode interface	
	Display	2.4" color TFT LCD
Display	Display modes	Setting screens, indicator value digital display, graph display, recorded data list display, static strain display
	Languages	Japanese/English
Indicator value	Display range	-99999 to 99999
	Decimal point	Display position selectable
Displayed items	Calibration settings	Zero calibration/span calibration (TEDS calibration, actual load calibration, equivalent input calibration)
	Function settings	High limit, low limit, comparison mode, hysteresis, nearly zero, moving average, motion detect, zero tracking, digital zero, digital zero offset, zone definition, hold mode, control lock, minimum grid, digital zero limit, clear digital zero, select data output, D/A converter
	Sensor value memory	Six types of calibration values for each connected sensor
Hold functions		Sample hold, peak hold, bottom hold, zone definition hold (peak, bottom)
Data recording	Indicator value	300 maximum Recorded contents: ID number, date and time, recording mode, sensor value memory number, indicator value
	Graph recording	8 maximum Recorded contents: ID number, date and time, sensor value memory number, trigger mode, graph waveform
Power supply		4 alkaline or NiMH AA batteries USB bus power (built-in Micro-USB B connector)
Operating temperature range		0 $^{\circ}$ to 40 $^{\circ}$ C
Storage temperature range		-20 $^{\circ}$ to 60 $^{\circ}$ C
Operating humidity range		85% RH or less (without condensation)
Applicable standards		CE marking, VCCI (Class A), FCC (Class A)
External dimensions (WxHxD)		Approximately 85 mm x 140 mm x 35 mm (without protrusions)
Weight		About 320 g (including batteries)

External dimensions



W85 mm x H140 mm x D35 mm (without protrusions)

Optional accessories



Carrying case (Soft) CS-TD01S



Carrying case (Hard) CS-TD01



*TD-01 Portable placed in a hard case

The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.

Althen – Your expert partner in Sensors & Controls | althensensors.com

Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

Germany/Austria/Switzerland
info@althen.de

Benelux
sales@althen.nl

France
info@althensensors.fr

Sweden
info@althensensors.se

USA/Canada
info@althensensors.com

Other countries
info@althensensors.com