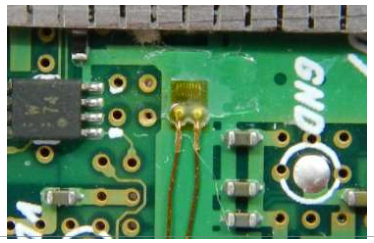
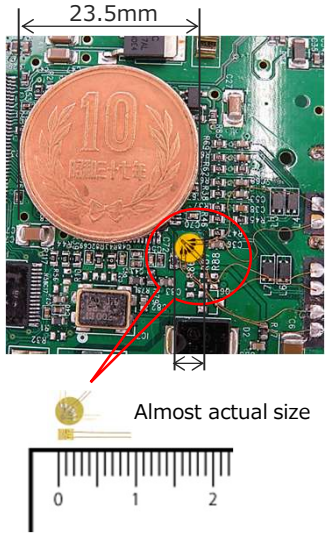
Board strain measurement



When electronic components are mounted on a board, mounting pressure is applied and some strain is generated in the board. Furthermore, the strain is generated when dividing the board as well. **Investigation of what type of strain is generated through the measurement of strain.**

■Size comparison of a 10-yen coin and a gauge



Extremely small gauge in millimeters, which can be affixed in a limited space on a board

■Extended channels setup screen

Monitored value

Extended Channels setting

CH.	Formulas	digit	Unit	Name	GRP.
@00	Ex1(CH(1),CH(2),CH(3))	#######	με	EX000	
@01	En1(CH(4),CH(5),CH(6))	#######	με	EX001	
@02	Gx1(CH(1),CH(2),CH(3))	#######	με	EX002	
@03	Sx1(CH(4),CH(5),CH(6),210,0.3)	#######	MPa	EX003	
@04	Sn1(CH(7),CH(8),CH(9),210,0.3)	#######	MPa	EX004	
@05	Tx1(CH(1),CH(28),CH(29),210,0.3)	#######	MPa	EX005	
@06	P1(CH(1),CH(2),CH(3))	#######	deg	EX006	
@07	(CH(1)+CH(2))/2	#######	με	EX007	ALL
@08	(CH(4)+CH(5))/2	#######	με	EX008	
@09	(CH@(7)+CH@(8))/2	#######	με	EX009	CLR

*Image is for illustration purposes.

Trigonometric functions, general functions, functions for rosette analysis etc.

NEW **Data Logger**
T-ZACCS 9
TS-960

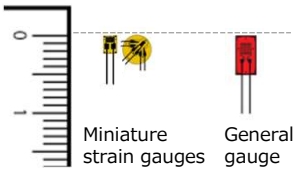
Point

- **100 channels of functions (extended channels) to obtain calculation results based on computation formulas**
- **Wide variety of arithmetic expressions including trigonometric, general, and rosette functions**
- **Fastest 0.1 second sampling measurement**
- **Measured data are saved on an SD card in CSV format.**
- **Images are saved including those drawn on the display (screen capture).**

【Examples of products】

Strain Gauges

Single axis : EFLK-02
2-axis : EFCA-05
3-axis : EFRA-05



Type	Gauge size (mm) Length	Width	Backing size (mm) Length	Width
EFLK-02-11	0.2	0.8	1.6	1.2
EFLX-02-11	0.2	0.8	1.8	1.2
EFCA-05-11-002LE	0.5	0.4	Φ3.8	
EFRA-05-11-002LE	0.5	0.4	Φ3.8	

Measuring the strain of board and prevent troubles

Component mounting

Substrate splitting

Reflow

Measuring the strain that occurs during the mounting/assembling processes, such as board division and reflow, and prevent problems from occurring!

Tokyo Measuring Instruments Lab.
URL https://www.tml.jp/e