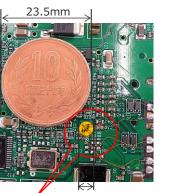
## **Board strain** measurement



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



Almost actual size

## Extended channels setup screen Monitored value

| 🔅 Extended Channels setting |                                  |         |      |       |      |  |
|-----------------------------|----------------------------------|---------|------|-------|------|--|
| CH.                         | Formulas                         | digit   | Unit | Name  | GRP. |  |
| 000                         | Ex1(CH(1),CH(2),CH(3))           | ####### | με   | EX000 |      |  |
| @01                         | En1(CH(4),CH(5),CH(6))           | ####### | με   | EX001 |      |  |
| 002                         | Gx1(CH(1),CH(2),CH(3))           | ####### | με   | EX002 |      |  |
| 003                         | Sx1(CH(4),CH(5),CH(6),210,0.3)   | ####### | MPa  | EX003 | _    |  |
| 004                         | Sn1(CH(7),CH(8),CH(9),210,0.3)   | ####### | MPa  | EX004 |      |  |
| 005                         | Tx1(CH(1),CH(28),CH(29),210,0.3) | ####### | MPa  | EX005 | -    |  |
| 006                         | P1(CH(1),CH(2),CH(3))            | ####### | deg  | EX006 | ₹    |  |
| 007                         | (CH(1)+CH(2))/2                  | ####### | με   | EX007 | ALL  |  |
| 008                         | (CH(4)+CH(5))/2                  | ####### | με   | EX008 | HLL  |  |
| 009                         | (CH@(7)+CH@(8))/2                | ####### | με   | EX009 | CLR  |  |

\*Image is for illustration purposes. Trigonometric functions, general functions,

functions for rosette analysis etc.



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

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

- ▼ 100 channels of functions (extended channels) to obtain calculation results based on computation formulas
- Vide 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]

Point

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

| Miniature<br>strain gauges | General strain<br>gauge |
|----------------------------|-------------------------|

| Туре             | Gauge size (mm)<br>Length Width |     | Backing size (mm)<br>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 | Ф3.8                              |     |  |
| EFRA-05-11-002LE | 0.5                             | 0.4 | Ф3.8                              |     |  |

## Measuring the strain of board and prevent troubles



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

