Electronic Measurements and Instrumentation

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CIRO

Function Generators

Signal generators

Ammeters

rollmeters

ohmmeless
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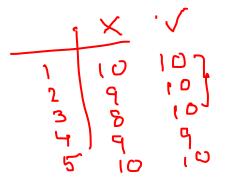
Performance Characteristics

There are two types of performance characteristics exist in instruments. They are

- >Static characteristics -> unvarying process condition(t- constant)
- Dynamic characteristics varying procus conditions (t avang)

Static Characteristics

- 1. Instrument -> 4 device
- 2. Measurement -7 Brocus
- 3. Accuracy -7 closeness / exact ness 9
- 4. Resolution -> Small change
- 5. Precision = successive values should not differ.
- 6. Expected value -> Expecting to measure.
- 7. Error -> 10,9->1 -> dift blue Expected & measured.
- 8. Sensitivity -7 Ratio of dvs



1. Instrument:

A device or mechanism used to determine the present value of the quantity under measurement.

2. Measurement:

The process of determining the amount, degree or capacity by comparison with the accepted standards of the system units being used.

3. Accuracy:

The degree of exactness/ closeness of a measurement compared to the expected or desired value.

4. Resolution:

The smallest change in a measured variable to which an instrument will respond.

5. Precision:

A measure of consistency or repeatability of measurements (i.e., successive readings do not differ).

6. Expected value:✓

The design value, i.e., the most portable value that calculations indicate one should expect to measure.

7. Error:

The deviation of the true value from the desired value.

8. Sensitivity: <

The ratio of the change in output of the instrument to a change of input or measured variable.