

## **ATH Spring Tester**

Product Description

As a special-purpose instrument, this testing machine is used to test amount of deformation and characteristic of load relation of extension and compression springs. It can be applied to the testing of working load of extension and compression springs under certain working length. Advanced and highly integrated chip microprocessor is adopted by this machine, which also has liquid crystal display (English) and metal enclosure. The interference-killing feature of the system is thus greatly improved.







ATH-10~30

ATH-50~500

ATH-1000~5000

## Functional Features

- 1. Liquid crystal display (English); better Human Machine Interface (HMI)
- 2. High precision and resolution
- 3. Three kinds of measurement units can be selected(N, Lb and Kg); inter-conversion is available
- 4. The user can independently set up acceleration of gravity of the place of usage. In this way, the testing and unit conversion would be more accurate
- 5. 99 sets of test data can be stored; the user can directly look over, store and delete data in the machine
- 6. The user can freely shift among the following three patterns: Real-time and peak-value patterns and the pattern of automatic peak value
- 7. It has the function of client setup and free setup of upper and lower limits (corresponding to audible and visual alarms), storage value, holding value, automatic storage time of peak value, automatic shutdown time (non-operation), etc
- 8. Judgment of acceptance or rejection of test data to be printed and stored, maximum value, minimum value and mean value (only for tape printing machine)
- 9. MODBUS-RTÚ standard agreement is adopted for communication; USB interface is adopted for better connection with configuration and PLC connection

## Technical parametrs

| Model Number                                 | ATH-10                 | ATH-20    | ATH-30 | ATH-50 | ATH-100 | ATH-150 | ATH-200 | ATH-300 | ATH-500 | ATH-1000 | ATH-2000 | ATH-3000 | ATH-5000 |  |
|--|------------------------|-----------|--------|--------|---------|---------|---------|---------|---------|----------|----------|----------|----------|--|
| Maximum testing load                         | 10N                    | 20N       | 30N    | 50N    | 100N    | 150N    | 200N    | 300N    | 500N    | 1000N    | 2000N    | 3000N    | 5000N    |  |
| Minimum resolution                           | 0.001N                 |           |        |        | 0.01N   |         |         |         |         | 0.1N     |          |          |          |  |
| Diameter of the platen                       | 34mm                   |           |        | 48mm   |         |         |         |         |         | 108mm    |          |          |          |  |
| Maximum free length of measurable spring     | 80mm                   |           |        |        | 150mm   |         |         |         |         |          | 200mm    |          |          |  |
| Length of travel of the displacement scale   |                        | 60mm      |        | 90mm   |         |         |         |         |         | 150mm    |          |          |          |  |
| Division value of the displacement scale     | 0.01mm                 |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Indication error                             | ± 1%                   |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Power Supply                                 | AC 110–240V, 50HZ–60HZ |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Power capability (without printer)           | 13W                    |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Power capability (without printer)           | 20W                    |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Working tempera ture                         | 20 ± 10℃               |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Temperature of storage<br>and transportation | −27°C~+70°C            |           |        |        |         |         |         |         |         |          |          |          |          |  |
| Relative temperature                         |                        | 15%~80%RH |        |        |         |         |         |         |         |          |          |          |          |  |