

| | | |
|---------------------------|---|--|
| Item | | Future Tech FM-ARS-F Micro Hardness Tester |
| Standard System Component | | Automatic X-Y Stage & Motor Drive Unit |
| | | CCD Camera |
| | | Complete set of PC: 23" TFT Wide LC Monitor, Mouse, Keyboard, and Joy-Stick with Controller |
| | | Standard Software for System ARS 9000 |
| | | PC: DELL or IBM Compatible Model with OS Windows 7 |
| Micro Hardness Tester | Type | Analog Type: Controllable Loading Operation by External PC |
| | Test Load | Test load type(A~D) can be selected. (FM-110S/FM-310S series) |
| | | Test load type(A~E) can be selected. (FM-810S series) |
| | | SETTING IS DIFFERENT BETWEEN MODELS |
| | Loading Mechanism | Automatic Load/Hold/Release Method |
| | Focus Operation | Automatic/Manual Operation available *Focusing Steps adjustable |
| | Auto Stage Elevation | Automatic: by Built-in Stepping Motor / Manual: by Standard Handle & Joy-Stick Operation *Safety Devices equipped for Overrun of Elevation |
| | Precision Vice | Standard: Max. Opening: 50mm |
| | Turret Rotation | Automatic/Manual changeable |
| | Load Applying Speed | 60µm/sec |
| | Dwell Time | 5-40sec |
| | Manual Ocular | OPTION: Analog Type |
| | Manual Measurement | By Video Line on TFT available |
| | Objective Lens | x10 / x50 (Optical Parts for 3rd Lens Built-in) |
| | Automatic Measurement Scale | Vickers Hardness (HV)/Knoop Hardness (HK) |
| Manual Measurement Scale | Vickers Hardness (HV)/Knoop Hardness (HK) is measurable with the optional analog type ocular. | |
| Automatic X-Y Stage | Driving Motor | Stepping Motor |
| | Drive Control | By icon: 2 Steps Speed available in X·Y·Z axis |
| | | By Joy-Stick: Flexible Speed Changing in X·Y·Z axis |
| | Dimensions | 110×110mm |
| | Max. Movement | 50x50mm |
| | Min. Movement | 1µm |
| | Moving Speed | 1-25mm/sec adjustable |
| Movement Program Pattern | | Straight Line (Vertical & Horizontal) |
| | | Zigzag |
| | | Circle |
| | | Arc |
| | | Line Set for any Angle (8 Lines and Max. 998 |

| | | |
|-----------------------------|---|---|
| | | <p>indents on 1 Line/Total 49950 indents are measurable.) Random</p> <p>Teaching</p> <p>Matrix (Max. 9999 indents in a range are measurable.)</p> <p>Specificity of 2 Points</p> <p>Specificity of Angle</p> <p>Sample Profile Memory Function & Measurement along with Profile Line</p> |
| Automatic Reading | Pattern Setting | Start Position Setting for Straight Line and Position Setting for Random/Teaching Mode shall be performed by Mouse-Click. |
| | Software | OS: Microsoft Windows 7 |
| | Available Hardness Scale | Vickers Hardness (HV)/Knoop Hardness (HK) |
| | Measurement Repeatability | ±0.8% on Test Block 700HV/500gf |
| | Auto-Focus Time | Shortest 3 sec |
| | Auto Reading Time | Approx. 0.2 sec/1 indent |
| | Measurable Min. Indent | 10µm |
| | Min. Measurement Unit | 0.1µm |
| | Manual Measurement | By OPTIONAL Ocular or Video Line on TFT |
| Available Languages Support | Japanese/English | |
| Other Features | Data Output Format and Editing Function | <p>Hardness Value, Hardness Chart, Case Depth, Insertion of Picture, etc.</p> <p>and Flexible Data Editing on "EXCEL"</p> |
| | Printer | Standard: Color Ink-Jet Type |
| | Joy Stick | For X·Y·Z axis Movement/Standard: Digital Type |
| | Manual Ocular | OPTION: Analog Type |
| | Safety Device | <p>Safety Devices equipped for Unmanned Operation</p> <p>* Turret Rotation stops instantaneously in case Object Lens or Indenter hits a specimen.</p> <p>* Upper & Lower Limit Stopper is equipped against Uncontrollable Stage Elevation.</p> |