

## Series F-S Master

Compact/ Economy/ Simple operation,

Easy to draw 'force-displacement' graph

Better access to high quality brightens the field of quality control and R.&D.



\* Attachment and computer are not included in the unit.

### [Application]

- Used for strength test for various materials (tension test, compression test, shearing test, peeling test etc.)  
Multipurpose system is used in the variety kinds of field.

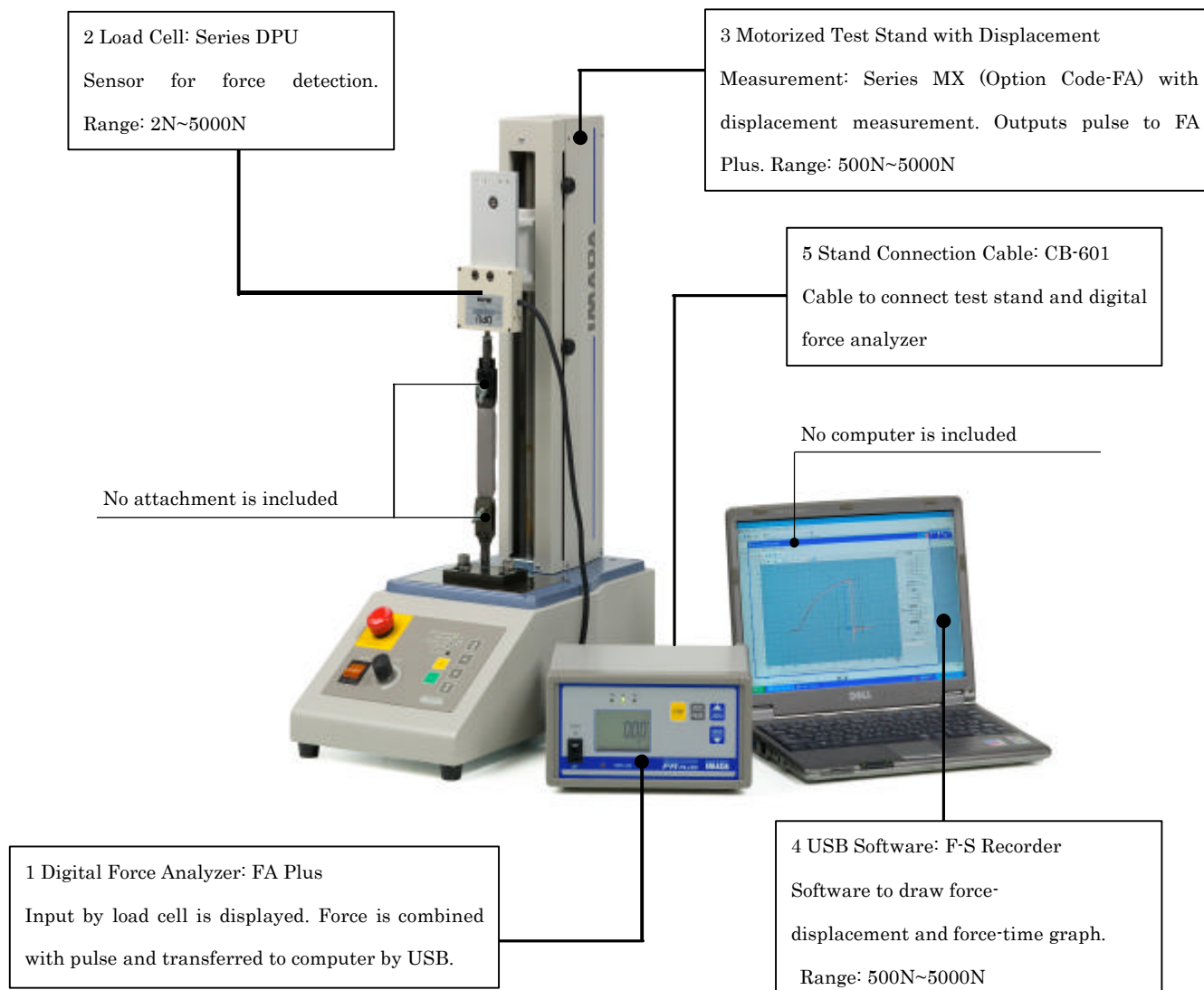
### [Characteristic]

- Keeping up well with force change by super high speed sampling (max 2000 times/ sec.)
- Free combination of force range load cell and test stand depends on purpose
- Spare sensor can be changed by users with broken sensor. (Force calibration by standard weight is needed)
- Test stand includes functions of displacement pulse output, over-force prevention and force control
- USB correspondence software draws force – displacement or force – time graph at real time. Data comparison by displaying five graphs is possible. Automatic recording function by force or displacement trigger is available.

## [Contents]

Force – displacement measurement unit consists of 1~5

Be aware that attachment and computer is not included.



## [Order]

Wide range suits for various purposes. Please refer to below.

### **F - S Master - 0.5K - 200N**

Range of Load cell (Max.)
2N, 5N, 10N, 20N, 50N, 100N, 200N, 500N, 1000N, 2000N, 5000N
Range of Test Stand with Displacement Measurement (Max.)
0.5K(500N), 1K(1000N), 2K(2000N), 5K(5000N)

\*Load cell is DPU for the above model. For other load cell, please contact us.

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## [1 Digital Force Analyzer: FA Plus]

Displays force value from load cell signal

- Change of unit. Track/Peak Selectable.
- Comparator/ Overload, Sampling Hi/Lo Selectable.
- Outputs displacement pulse from test stand and force value to computer with USB.



\* Please refer to specification for the detail and dimension.

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## [2 Load Cell: Series DPU]

Load Cell for tensile and compression: Series DPU is included.

Range is from 2N to 5000N. Please choose one suitable for your purpose.

\* Please refer to specification for the detail and dimension.

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## [3 Motorized Test Stand with Displacement measurement: Series MX (Option code-FA) ]

Optical displacement scale is attached to the conventional test stand: Series MX.

The range, instruction and function are the same with the conventional Series MX.

Range is from 500N to 5000N. Please choose one suitable for your purpose.

\* Specification is the same with Series MX (Exc. Pulse output). Please refer to motorized test stand: Series MX for the detail specification.

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## [ 4 USB Correspondence Software: F-S Recorder ]

Easy to draw force-displacement/ force-time graph with USB

- Direct input of super high speed sampling (max 2000times/sec.)
- Comparison of data by displaying five (max.) graphs
- Automatic start/stop function for recorder by force/displacement trigger
- Statistics (Max./Min./Average etc.)

### Operational Condition

OS: Windows2000 Sp3/ XP SP2/ Vista
Later than Microsoft Internet Explorer 5.01
Microsoft NET Gramework2.0

\* Please refer to specification for the detail.

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## [5 Stand Connection Cable: CB-601]

Cable to connect test stand and digital force analyzer. Length-approx. 1m.

[Specification]

Item		Force-Displacement Test Unit
Model		F-S Master-?K-?N
Unit	Force	N(kN) , kgf(gf) , lbf(ozf) Selectable
	Displacement	mm , inch Selectable
Range	Load Cell	2N, 5N, 10N, 20N, 50N, 100N, 200N, 500N, 1000N, 2000N, 5000N Please choose one from Series DPU.
	Motorized Stand	0.5K(500N), 1K(1000N), 2K(2000N), 5K(5000N) Please choose one from series MX.
Resolution	Force	4 Digits with unit (Ex. Resolution of Load Cell5N= 0.001N)
	Displacement	0.01mm (Displayed on F-S Recorder)
	Speed	0.1mm/min (Displayed F-S Recorder)
Accuracy	Force	±0.2%F.S. ±1 Digit
	Displacement	±0.1mm ±1 Digit (No force) * When max. force is applied, the stand may be deformed. upward and downward (approx. -1mm~+1mm)
Test Stand Stroke/Speed		0.5K(500N) ;280mm/ 10-300mm/ min 1K(1000N) ;430mm/8-240mm/min 2K(2000N) ;355mm/6-18mm/min 5K(5000N) ;340mm/10-300mm/min *1 Stroke and Speed differ depending on range of motorized stand. *2 Stroke is from table to tip of load cell measurement shaft.
Sampling Speed		max 2000times/sec.
Display Update		10times/sec.
Output		USB, RS232C, Analogue (Approx. -2V~2V), Comparator, Overload
Test Stand		Stroke limit, Over-force stop, Force control, Emergency stop
Power		AC100V~240V * Respective power is needed for both test stand and force analyzer
Accessories		Instruction manual, Inspection certificate, 2 Power cables, 2 Spare fuse, Driver CD-ROM, FAP Logger, F-S Recorder

\* Please refer to respective specification of each product for the details.

[Caution]

- Attached load cell is Series DPU. Please contact us for other types of load cell
- Please be sure to calibrate with standard weight when load cell is changed. If users do not have calibration system, we offer charged calibration service. Please contact stores about expenditure and period.
- The contents may change without notice.



Please feel free to contact us if not sure whether our products suit for your purpose.  
We are glad to help you with measurement, selection of suitable range, and so on.