FlexiForce®

Wireless Economical Load and Force Measurement™ 2 (WELF2)

The Wireless ELF 2 System (WELF2) is a user-friendly, cost-effective load measurement system. This system combines 3 FlexiForce WB201 sensors, a battery-operated WiFi transmitter (certified 802.11b radio- 802.11b/g/n compatible), and Windows-compatible software*, turning your PC or laptop into a force measurement instrument. The WELF2 system has sampling rates up to 200 Hz and is available in a high speed version with sampling rates up to 6,000 Hz. The system has multi-handle capabilities and can support up to 16 handles. The WiFi connection setup has ad hoc and access point (unsecured router) network capability. For multi-handle use, an unsecured router is required.

Compatible with Windows 7, 8, XP, and Vista

KEY FEATURES

- Real-time data capture
- ASCII output to data analysis software
- Simple and storable calibration
- Adjustable sensitivity
- Displays in strip chart, column graph, or digital readout
- Movie recording & saving
- Multi-point calibration
- Capability to tare a load

- Internal load triggering
- Includes 3 AAA Batteries with battery life up to 5 hours
- Optional power supply is available for purchase
- Includes 3 FlexiForce WB201 sensors
- WELF 2 is compatible with all FlexiForce sensor models using the ELF adapter tab
- Additional transmitters available for purchase (an unsecured router is required for multi-handle use.)

SYSTEM PERFORMANCE

WELF 2 System	Sampling Rate	Range	Max. # of Transmitters	Includes:
Standard	Up to 200 Hz	1 Transmitter - 65 meters 1+ Trans. - 50 Meters	Up to 16	• (1) Transmitter • (3) WB201 Sensors • ELF Software
High-Speed	Up to 6,000 Hz	1 Transmitter - 65 meters 1+ Trans. - 25 Meters	Up to 8	• (1) Transmitter • (3) WB201 Sensors • High-Speed ELF Software

PHYSICAL WIFI TRANSMITTER PROPERTIES

Weight	95 g (3.3 oz.)
Length	95.3 mm (3.7 in.)
Width	46.4 mm (1.83 in.)
Height	26.7 mm (1.05 in.)

95.3 mm (3.75 in.)

46.4 mm (1.83 in.)

WIRELESS ELF
freedom in force sensing
FlexiForce® by Tekscan

WELF2 Handle (WiFi Transmitter)

PHYSICAL SENSOR PROPERTIES OF WB201

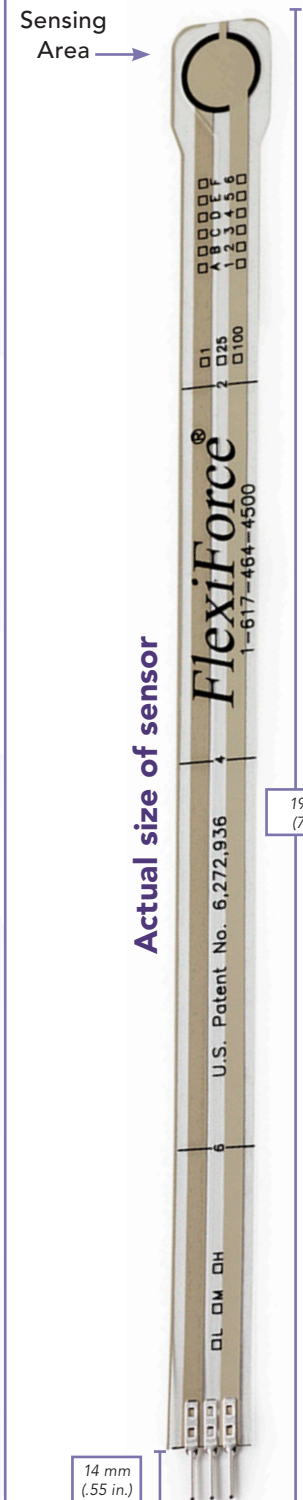|	
Thickness	0.208 mm (0.008 in.)
Length	228.6 mm (9 in.) End-to-end
Width	14 mm (0.55 in.)
Sensing Area	9.53 mm (0.375 in.) diameter

✓ ROHS COMPLIANT

WELF 2 is compatible with all FlexiForce sensor models using the ELF adapter tab.

RECOMMENDED MAXIMUM FORCE
(variable gain feature of the WELF2 System enables adjustable force ranges)

Sensor	High Gain Maximum Force	Low Gain Maximum Force
WB201-L	4.4 N (0 - 1 lb)	111 N (0 - 25 lb)
WB201-M	111 N (0 - 25 lb)	667 N (0 - 150 lb)
WB201-H	667 N (0 - 150 lb)	4448 N (0 - 1,000 lb)

	Typical Performance	Evaluation Conditions
Linearity (Error)	< ±3%	Line drawn from 0 to 50% load
Repeatability	< ±2.5% of full scale	Conditioned sensor, 80% of full force applied
Hysteresis	< 4.5 % of full scale	Conditioned sensor, 80% of full force applied
Drift	< 5% per logarithmic time scale	Constant load of 111 N (25 lb)
Operating Temperature	-40°C - 60°C (-40°F - 140°F)	

Sensing Area →

14 mm (.55 in.)

Actual size of sensor

FlexiForce®
1-617-464-4500
U.S. Patent No. 6,272,936

191 mm (7.5 in.)

14 mm (.55 in.)

Tekscan®

ISO 9001 & 13485

🌐 +1.617.464.4283   📞 1.800.248.3669   ✉ info@tekscan.com   www.tekscan.com/flexiforce