



SPARTASCIENCE

# The Sparta System

## Product Description

The Sparta Science force plate (Model SSFP01) measures ground reaction forces and analyzes the sequence in which such forces are applied. The force plate can either be portable (i.e., operating on a hard, flat surface), or fixed installation (i.e., mounted in a frame so that it is even with the floor). For portable models, a mat is used to allow for a flush landing surface on or around the force plate.

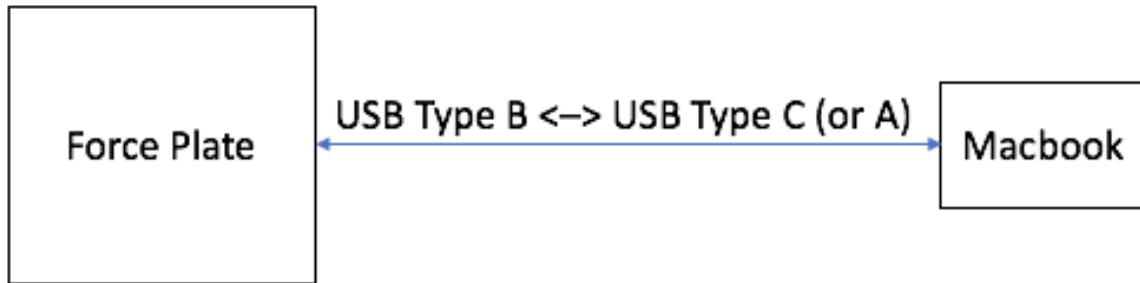
Key characteristics:

- Proven & reliable strain gauge technology
- Capacity of approximately 10,000 Newtons with outstanding accuracy and linearity
- Overload capacity of 150% for static loads (higher for impulse loads)
- 1 kHz sampling frequency



[SpartaScience.com](https://www.SpartaScience.com)

# Installation Instructions

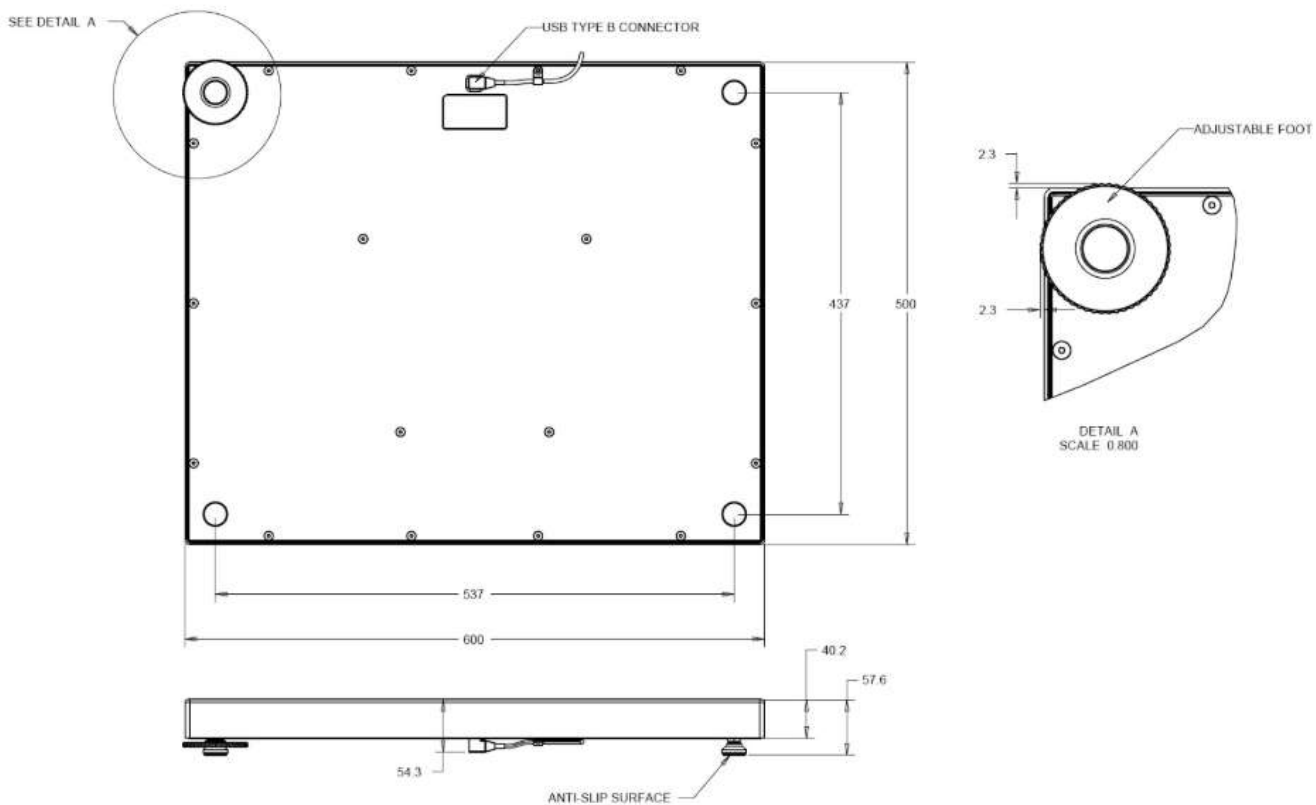


Materials:

Force Plate: Aluminum (6061 or ADC12)

Bottom Cover: ABS Plastic (Acrylonitrile butadiene styrene)

## Product Dimensions



# Technical Data

<b>Model Designation</b>	<b>SSFP01</b>
Width mm (in)	500 (19.75)
Length mm (in)	600 (23.62)
Height mm (in)	57.6 (2.27)
Mass, kg (lb)	13.0 (28.8)
Measuring Range (N)	10000
Safe Overload Fz (N)	150%
Sampling Frequency	1 kHz
Natural Frequency Fx (Hz)	108.7
Natural Frequency Fy (Hz)	118.2
Natural Frequency Fz (Hz)	160.9
Static Resolution Fz, N (lb)	± 0.01
Resolution Fz, N/LSB (lb/LSB) *	0.02
Linearity, %FSO **	± 0.05
Input Voltage (V)	5
Operating current (mA)	<250
Max current (mA)	500
Operating Temperature Range	0-40 C (32-104 F)
Operating Relative Humidity (RH)	30-70%
Operating Altitude	<2000 m
Installation	Portable or Fixed Installation
<b>Packaged Unit:</b>	
Width mm (in)	609.6 (24)
Length mm (in)	708.025 (27.875)
Height mm (in)	158.75 (6.25)
Mass, kg (lb)	15.24 (33.6)

\* LSB = Least Significant Bit

\*\* FSO = Full Scale Output (% deviation from linear)

## Product Safety Compliance

Conforms to the safety standards:

UL 61010-1, 3rd Edition

CSA C22.2 No. 61010-1, 3rd Edition

EN 61010-1: 2010, 3rd Edition

IEC 61010-1, 3rd Edition

EMC standards:

FCC Part 15, Subpart B

CAN ICES-3 (A)/NMB-3(A)

EU/EMC Directive 2014/30/EU EN61326-1:2013

(Class A, Group 1)



## Regulatory Notes

This information corresponds to the current state of knowledge. Sparta Science reserves the right to make technical changes. Liability for consequential damage resulting from the use of Sparta Science products is excluded.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## Contact Information

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