

WFP-1

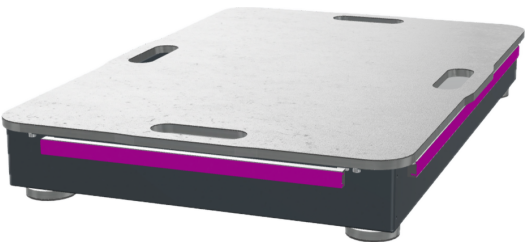
Wireless Dual Force Plate System



Online datasheet · English

Scan for the latest datasheet and downloads.

<https://wellbodytech.com/docs/datasheet/force-plate>



Portable dual force plates for ground-reaction-force measurement in performance, sports science, and clinical settings. Plates synchronize wirelessly; sessions are controlled with the **Well Body Tech (WBT)** companion app on Android tablets.

- Dual-plate system (Plate A + Plate B)
- 1,000 Hz sampling
- Rated load 1,000 kg (≈ 10 kN) per plate
- Well Body Tech (WBT) — start, stop, zero, calibrate on Android tablets
- USB-C charging from a standard 5 V phone charger
- Status lights and in-app battery indicators

1. Applications

Countermovement and drop jumps · isometric mid-thigh pull and strength tests · balance and asymmetry · return-to-play screening · dual-stance and single-leg protocols.

2. Absolute maximum ratings (1)

Stresses beyond these ratings may cause permanent damage. Exposure to absolute-maximum conditions for extended periods may affect reliability.

PARAMETER	SYMBOL	MIN	MAX	UNIT	NOTES
Vertical load, per plate	$F_{z,max}$	—	10 000	N	$\approx 1\,000$ kgf; do not impact with free weights
Storage temperature	T_{stg}	−20	+50	°C	
Charge input voltage	V_{USB}	—	5.5	V	USB-C; 5 V nominal phone chargers
Relative humidity (non-condensing)	RH	—	95	%	Non-operating

3. Recommended operating conditions

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Ambient operating temperature	T_A	5	25	40	°C
Relative humidity (operating)	RH_{op}	10	—	90	%
Wireless link distance (indoor, open)	d_{RF}	—	8	10	m
USB-C charge supply	V_{chg}	4.75	5.0	5.25	V

(1) Absolute maximum ratings are stress ratings only. Functional operation is not implied at these extremes.

4. Performance characteristics ($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise noted)

4.1 Measurement

PARAMETER	CONDITIONS	MIN	TYP	MAX UNIT
Number of plates	System configuration	—	2	— —
Vertical force channels	Per plate / system	—	4 / 8	— —
Sample rate	Per channel, continuous	—	1000	— Hz
Rated capacity (F_z)	Per plate, vertical	—	10 000	— N
Safe overload	Of rated capacity	—	120	— %
Non-linearity (2)	Full scale, after cal	—	± 0.5	± 1.0 % FS
Hysteresis (2)	Full scale, after cal	—	± 0.5	± 1.0 % FS
Noise (rms) (2)	Empty plate, 1 s window	—	< 2	5 N
Cross-talk (2)	Corner to corner	—	< 1	2 %
Zero drift (2)	30 min after warm-up	—	< 0.05	0.1 % FS

(2) Typical values after factory / in-app calibration on a rigid floor. Guaranteed limits require formal characterization on production units.

4.2 Connectivity & system

PARAMETER	CONDITIONS	TYP	UNIT	NOTES
App link	Well Body Tech (WBT)	Bluetooth LE	—	Android tablets ≥ 10 inch; one client at a time
Inter-plate sync	Plate A $\leftrightarrow$ Plate B	Wireless	—	Automatic when powered
Plate-to-plate skew (2)	Simultaneous edge	< 2	ms	Typical indoor
Control latency (UI $\rightarrow$ record)	App Start	< 100	ms	Typical

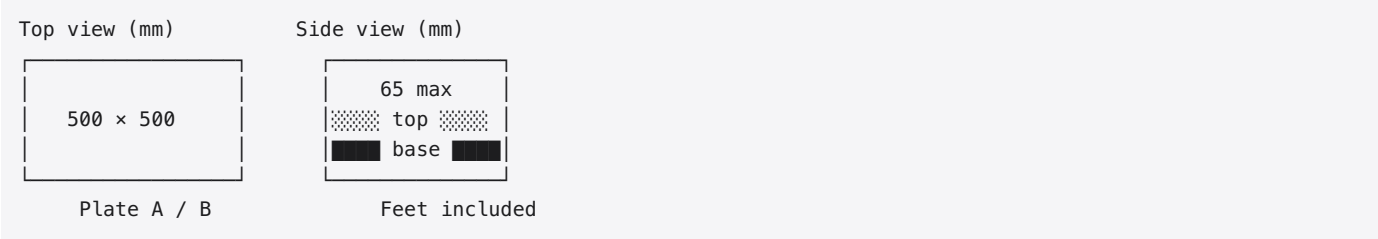
4.3 Power

PARAMETER	CONDITIONS	MIN	TYP	MAX UNIT
Battery	Per plate, built-in rechargeable	—	Yes	— —
Runtime, recording	Continuous capture, lights on	6	7	— h
Runtime, idle	Powered, not recording	24	36	— h
Charge time, 0 $\rightarrow$ 100%	5 V USB-C phone charger ≥ 2 A	—	3.5	4.5 h
Charge interface	Per plate	—	USB-C	— —

5. Mechanical characteristics

PARAMETER	TYP	UNIT	NOTES
Top surface size (L × W)	500 × 500	mm	Per plate
Overall height	65	mm	Including feet
Mass	12	kg	Per plate, approx.
Enclosure rating	IP42	—	Indoor use; splash-resistant
Top surface	Textured polymer	—	Handle cut-outs on four sides
Status indication	Side light bars	—	Ready / recording / error (app can disable)

5.1 Outline dimensions (reference)



Dimensional drawing is for reference. CAD package available from support on request.

6. Environmental & compliance

ITEM	SPECIFICATION
Intended environment	Indoor training facilities, clinics, laboratories
Ingress protection	IP42 (IEC 60529)
EMC / radio	Designed to meet FCC Part 15 / CE RED — certification IDs pending
Battery transport	Follow IATA / UN38.3 packing instructions for lithium batteries when shipping
RoHS	Materials selected for RoHS compliance — declaration on request

7. Ordering information

ORDERABLE DEVICE	DESCRIPTION	CONTENTS
WFP-1	Wireless Dual Force Plate System	Plate A, Plate B, 2× USB-C cables, quick start, user manual
WFP-1-ACC-CHG	USB-C wall charger kit (optional)	2× 5 V / 2 A USB-C adapters
WBT	Well Body Tech companion app	Android tablets (10 inch+) via Google Play; standalone on more platforms coming soon

Well Body Tech on Google Play: <https://play.google.com/store/apps/details?id=com.wellbodytech.tablet>

8. Related documents

DOCUMENT	NUMBER	DESCRIPTION
User Manual	UM-WFP1-001	Operator setup, charging, Well Body Tech use, care (EN / TR)
Hardware & Interface Spec	HW-WFP1-001	Service / integrator technical reference

9. Revision history

REV	DATE	DESCRIPTION
A	2026-08-10	Initial customer datasheet release

Specifications are subject to change without notice. Typical (Typ) values are not guaranteed unless listed under Min/Max with stated test conditions. Performance figures marked with note (2) are design targets pending formal production characterization. © Product documentation for WFP-1. Unauthorized reproduction for competing products is prohibited.