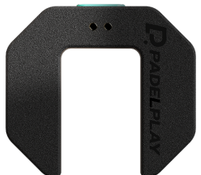
# PadelPlay sensor

PS215

User manual




## About this document

As padel enthusiasts ourselves, we've been hooked on the sport since the first time we stepped on court. Our goal is simple: to help players of all abilities to unlock their full potential and engage with the game like never before.

PadelPlay. Track Every Shot, Master Your Game.

This manual explains how to install, operate and maintain the device safely, and lists the legal obligations that apply in the EU and the United States. It is written for padel players aged 14 years and above; no special technical skills are required.

## 1. Product

### 1.1. Intended use

The PS215 is an inertial-measurement-unit (IMU) with Bluetooth LE that mounts to the butt-cap of a padel racket via a dedicated silicone sleeve and over-grip. It records swing metrics (speed, spin, impact point, etc.) and transmits them to the PadelPlay mobile app for performance analysis.

Reasonably foreseeable misuse includes:

- attaching the sensor to other sports equipment (tennis, golf, baseball bats, etc.);
- using it as a toy or jewellery;
- operating it while charging;
- submerged or high-impact use. Such misuse may impair accuracy or damage the battery.

### 1.2 General specifications

| Parameter | Value |
|---|---|
| Model | PS 215 |
| Dimensions (Ø × H) | 26 mm × 10 mm (without sleeve) |
| Weight | 8 g (sensor only, ≈ 16 g incl. sleeve + over-grip) |
| Power input | 5 V DC 0.5 A (USB-C) |
| Battery | 3.7 V Li-Po 45 mAh (rechargeable) |
| Frequency band | 2 400 – 2 483.5 MHz |
| Max. transmit power | +8 dBm |
| Operating temperature | 0 – 40 °C |
| Operating humidity | 0 – 95 % RH, non-condensing |

### 1.3 Requirements for work/use environment

- Ambient temperature 0–40 °C and dry conditions.
- Keep strong magnets, RFID gates and high-RF sources ≥30 cm away to avoid interference.
- Adequate lighting when fitting or removing the sensor to prevent accidental cuts.

### 1.4 Main parts

*Overview of the main parts of the product.*

| | |
|---|---|
| 1. | Sensor body (USB-C port & charging dots) |
| 2. | Silicone mount |
| 3. | Over-grip & finishing tape |
| 4. | USB-C cable |

## 2. Safety

### 2.1. Safety features

- Li-Po battery with built-in protection circuit.
- Auto-sleep after 5 min inactivity to prevent overheating.
- Over-the-air firmware checksums to prevent corrupted

### 2.2. Safety symbols and labels on the product

| Mark | Meaning |
|---|---|
| CE / UKCA | Conformity with EU/UK directives on radio & RoHS |
| | Separate collection of batteries |
| ⚠ CHOKING | Not for children < 3 yrs |

### 2.3. Safety warnings and regulations

**⚠ DANGER - Lithium-polymer battery**
Do not puncture, crush, short-circuit or expose above 140 °C; risk of fire or toxic fumes

**⚠ WARNING - Pacemakers & ICDs**
Magnets and RF transmitters inside the sensor may affect implanted cardiac devices; keep ≥ 15 cm (6 in) from the chest and consult a physician before use.

**⚠ WARNING - Small parts**
Sensor, mount and finishing tape present a choking hazard to children under 36 months

**⚠ CAUTION - Impact**
Ensure mount is fully seated; an unsecured sensor may fly off the racket and cause injury.

**NOTICE - Moisture**
Splash-proof only; do not submerge or expose to heavy rain.

## 3. Installation

### 3.1 Remove packaging

1. Check that the following items are present: sensor, silicone mount, over-grip, finishing tape, USB-C cable, quick -start card.

2. Recycle paper/cardboard; dispose of plastic bags according to local rules.

### 3.2 Mounting sensor to racket

1. Fully charge the sensor (LED breathes green when complete).

2. Fold the thin lip of the silicone mount outward until mid-position (see fig.).

3. Slide the mount over the butt-cap; unfold lip smoothly around the handle.

4. Wrap the PadelPlay over-grip over the mount, starting from the butt upward.

5. Secure with the supplied finishing tape.

6. Align the two gold charging dots downward and push the sensor into the mount until it
clicks.

### 3.2 Downloading the app

1. Scan the QR code or search "PadelPlay" in the Apple App Store (iOS 15+) or Google Play (Android 11+) padelplay.ai.

2. Allow Bluetooth and motion-sensor permissions when prompted.

## 4. Installation

### 4.1 Setting up the app

- Create a profile.
- Pair the sensor via Bluetooth LE; LED turns solid blue on success.

### 4.2 Normal use

- Start a session in the app; the sensor records up to 8 h or 10 000 strokes.
- Keep your phone within 10 m for live stats; otherwise data is cached locally.

## 5. Troubleshooting

| Problem | Cause | Solution |
|---|---|---|
| No power | Battery empty | Recharge 2 h via USB-C |
| App cannot find sensor | Bluetooth off / out of range | Enable BT, keep within 10 m |
| Data inaccurate | Mount loose or inverted | Reinstall mount, align dots |
| Sensor warm | Continuous charging | Unplug after full charge |

## 6. Maintenance

### 6.1 Periodic tasks

- App updates – enable auto-update in your app store.
- Firmware – Settings › Firmware › Check update.
- Cleaning – wipe with soft, slightly damp cloth; no solvents.

### 6.2 Spare parts

Replacement mounts, over-grips and cables available at shop.padelplay.ai.

## 7. Storage and transportation

Store at 20 – 25 °C, 40 – 60 % RH; recharge to ~50 % for storage > 3 months. Use the supplied pouch and keep metal objects away from the charging dots.

## 8. Warranty

Two-year limited warranty against manufacturing defects (EU consumer rights unaffected). Full terms at padelplay.ai/warranty.

## 9. Disclaimer

PadelPlay is not liable for injury, data loss or property damage resulting from misuse, unauthorised modifications or failure to follow this manual.

## 10. Disposal

The crossed-out wheeled-bin symbol on the product and its battery means they must not be placed in household waste. Please take them to an approved collection point for electrical and electronic equipment, in accordance with local recycling regulations. Separate disposal allows valuable materials to be recovered, reduces the volume sent to landfill or incineration, and limits potential harm to human health and the environment. For details of nearby drop-off facilities, contact your local waste authority or PadelPlay customer support.

### Declaration

Hereby, PadelPlay declares that the PS215 is in compliance with Directives 2014/53/EU & 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:

https://www.[website].com/

### FCC Warning

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.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC RF exposure statement:**
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.
FCC ID: 2BP35-PS215