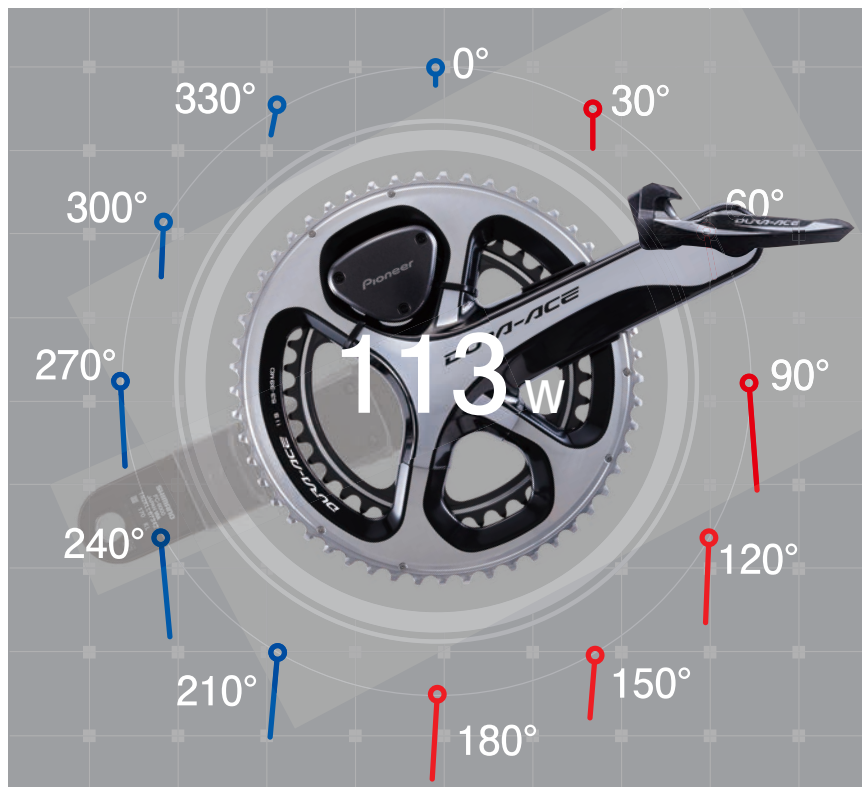


Pioneer

PEDALING MONITOR SENSOR  
**SGY-PM900**

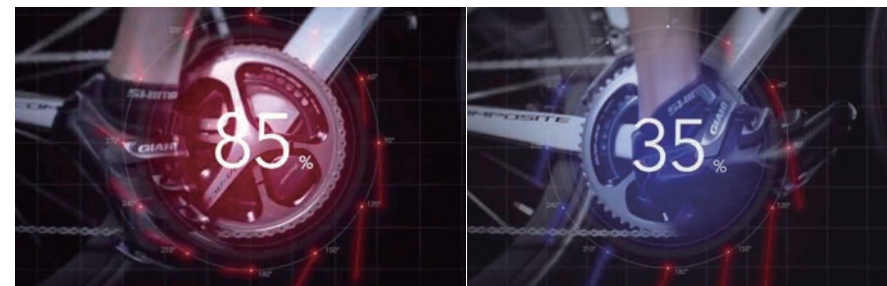
# World first\* measurement of "force" and "direction of force" every 30° of rotation

\* The "SGY-PM 900" is the first system to measure and display results for every 30° of pedaling rotation.



■ Measurement of "force" and "direction of force" every 30° of rotation

By detecting minute changes in strain on the crank every 30° during pedaling, the "SGY-PM 900" measures "force" and "direction of force" in 12 locations per cycle. With this data, analyze the unique characteristics of your pedaling, and quantify your performance as a "Pedaling Efficiency" value.



■ With this data, analyze the unique characteristics of your pedaling, and quantify your performance as a "Pedaling Efficiency" value.

Pioneer

PEDALING MONITOR SENSOR  
**SGY-PM900**

Independent sensors on the left and right sides measure "force" and "direction of force" from the left leg and right leg separately, each in 12 different locations per cycle.



The independent left and right sensors are installed on the inner side of the crank arm, enabling independent measurement of "force" and "direction of force" on the left and right sides.

Left sensor unit

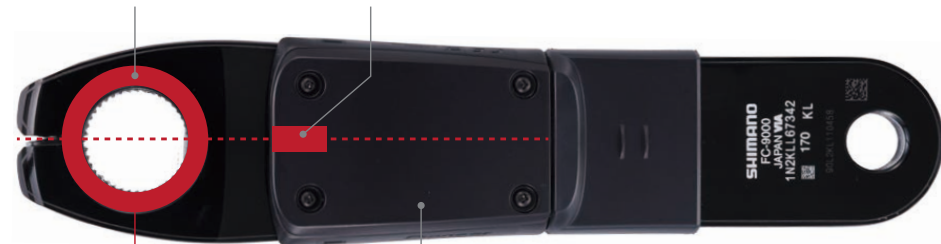


Right sensor unit



Magnet ring

Magnet sensor



Transmitter (sensor unit)



A magnet ring installed on the Bottom Bracket contains magnets in 12 different locations. The device detects the magnets with a magnetism sensor, accurately measuring "force" and "direction of force" every 30°

Pioneer

PEDALING MONITOR SENSOR  
**SGY-PM900**

# High-accuracy measurement under various temperature conditions and durability/water-resistance tested in real use



## High-accuracy measurement even under harsh conditions



Operates in  
**-10°C to +50°C**

The "SGY-PM 900" operates even under -10°C to 50°C temperatures. In any environment that athletes endure, the "SGY-PM 900" can make stable measurements. Zero-point calibration, necessary for accurate measurement, can be accomplished simply and quickly. After being calibrated several times, the sensor will learn the characteristics of the environment and automatically respond to changes in temperature.



■ Easy zero-point calibration,

## Durability and water-resistance tested by top athletes in real use



■ Reliable measurement on rough roads



■ 200-hour battery (under normal temperatures)  
One CR2032 battery each on left and right, easily exchangeable



■ IPX6 proven water resistance

\* IEC-standard water resistance

PEDALING MONITOR SENSOR  
**SGY-PM900**

# Specifications

- Independent strain sensors for the left and right sides, highly precise sensing of minute changes on the crank at every 30 degrees
- Measures the force placed on the crank and loss component\* for each 30 degrees of rotation
- The wirelessly transmitted data can be displayed on the cycle computer every second

\*Loss component : This is the power applied in the direction opposite to crank rotation and the power applied in the radial direction.



PEDALING MONITOR SENSOR  
**SGY-PM900H90**

(For SHIMANO FC-9000)



Weight	73g	Battery	CR2032
External dimensions	[Pedaling monitor sensor (right side)] W×H×D (mm)	•Right transmitter: 60.7×46.9×21.6 •Junction box, Strain gauge unit cover: 63.3×47.2×9.9	Battery operating time *2 Approximately 200 hours (normal temperature)
	[Pedaling monitor sensor (left side)] W×H×D (mm)	99.4×48.2×14.6	Guaranteed operational temperature range -10 to 50°C
	[Magnet ring] (mm)	φ57.0× 3.5	Accessories Magnet ring, Magnet ring attachment for Hollowtech II, Batteries (CR2032), Cable ties, Phillips-head screws, User's Manual, Important Information for the User, Warranty Card
Water-resistance	IPX6	Implemented crank	SHIMANO FC-9000
Communications system(sensors)	ANT+™*1 standard		

PEDALING MONITOR SENSOR  
**SGY-PM900H79**

(For SHIMANO FC-7900/7950)



Weight	72g	Battery	CR2032
External dimensions	[Pedaling monitor sensor (right side)] W×H×D (mm)	•Right transmitter: 60.7×46.9×20.1 •Junction box, Strain gauge unit cover: 63.2×36.8×9.9	Battery operating time *2 Approximately 200 hours (normal temperature)
	[Pedaling monitor sensor (left side)] W×H×D (mm)	100.0×40.7×15.7	Guaranteed operational temperature range -10 to 50°C
	[Magnet ring] (mm)	φ57.0× 3.5	Accessories Magnet ring, Magnet ring attachment for Hollowtech II, Batteries (CR2032), Cable ties, Phillips-head screws, User's Manual, Important Information for the User, Warranty Card
Water-resistance	IPX6	Implemented crank	SHIMANO FC-7900/7950
Communications system(sensors)	ANT+™*1 standard		

## Compatible Bottom Brackets

The Pedaling Monitor is compatible with 4 types of Bottom Bracket \*3; SHIMANO HOLLOWTECH II, BB86, BB30 and PF30. For HOLLOWTECH II the standard SHIMANO Bottom Bracket (BB9000、BB7900、BB6700) may be used, but for BB86, BB30 and PF30 the Bottom Bracket must be replaced with our specific Bottom Bracket Option Parts. These Option Parts are available with Steel or Ceramic Bearings.

**BB86** Pedaling Monitor Sensor Bottom Bracket Adapter (For BB86/Steel Bearings) **SGY-BB86**  
Pedaling Monitor Sensor Bottom Bracket Adapter (For BB86/Ceramic Bearings) **SGY-BB86C**

**BB30** Pedaling Monitor Sensor Bottom Bracket Adapter (For BB30/Steel Bearings) **SGY-BB30**  
Pedaling Monitor Sensor Bottom Bracket Adapter (For BB30/Ceramic Bearings) **SGY-BB30C**

**PF30** Pedaling Monitor Sensor Bottom Bracket Adapter (For PF30/Steel Bearings) **SGY-BBPF30**  
Pedaling Monitor Sensor Bottom Bracket Adapter (For PF30/Ceramic Bearings) **SGY-BBPF30C**