

**SONY**<sup>®</sup>

# White paper

August 2015



**SmartBand 2**

SWR12

# About this document

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This document contains technical specifications for the Sony SWR12 SmartBand 2 accessory.

## Document history

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Version		
August 2015	First released version	Version 1

## Sony Mobile Developer World

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For the latest technical news, tutorials and development tools, go to [www.sonymobile.com/developer](http://www.sonymobile.com/developer).

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# Product overview

## SmartBand 2 SWR12

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SmartBand 2\* is an innovative life logging wristband that monitors your pulse, Heart Rate Variability (HRV), your movements and the quality of your sleep. SmartBand 2 is compatible with both Android™ and iOS devices.

SmartBand 2 gathers information on your daily activities. The sensors on the device can help you gauge physical exertion when you exercise by monitoring your pulse and the changes in your heart rate. With the SmartBand 2 on your wrist, it can count your steps whether you're out for a stroll or jogging in the park. It also has a smart wakeup feature that wakes you up at the best time in the morning based on your sleep cycle.

Once paired with a compatible Android™ or iOS device, SmartBand 2 uses 3 LEDs and vibrations to notify you when an alarm, a message or a call arrives. You can even use SmartBand 2 to control media playback or the camera on your mobile device.

*\* This device is not a medical device. It is not intended for medical use or to replace the advice of a qualified medical professional. Please seek medical advice before undertaking any new or altered training regime using this device, particularly if using this device together with a pacemaker or other medical devices.*

## Technical specifications

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<b>Processor</b>	ARM Cortex-M0 32-bit processor
<b>Size (module)</b>	40.7 x 15.3 x 9.5 mm
<b>Length of wrist band</b>	250 mm
<b>Weight</b>	
Module	6 grams
Wrist band including module	25 grams
<b>Available colours</b>	
Wrist band	Black, White*
Module	White
<b>Keys</b>	Power key (On/off)
<b>Vibrator</b>	Yes
<b>LED</b>	3 RGB LEDs
<b>Memory</b>	

Flash memory	256KB internal embedded flash memory
RAM	32KB
<b>Sensors</b>	
Accelerometer	Yes
Heart rate sensor	Yes
<b>Bluetooth</b>	
Bluetooth specification	4.0, supports Bluetooth® Low Energy
Transfer rate	< 3Mbps
<b>NFC</b>	Yes, for One-touch pairing and mobile device access
<b>USB</b>	Yes, standard micro USB for charging
<b>Battery</b>	
Type	Lithium-ion
Charge time	1 hour and 15 minutes
<b>Usage time</b>	
With normal mode enabled	Up to 2 days
With STAMINA mode enabled	Up to 5 days
With Heart activity mode enabled	Up to 10 hours
<b>Environmental data</b>	
Operating temperature range	-20°C to +60°C
Operating humidity range	5% to 99% RH
Storage temperature range	-40°C to +85°C
Storage humidity range	20% to 95% RH
Charging temperature range	10°C to 32°C
Water and dust classification	IP68**

\* Additional colours will be made available for the Sony SmartBand 2 after the product launch.

\*\* In compliance with IP68 standards, this accessory is protected against the ingress of dust and water. Provided that all ports and covers are firmly closed, the accessory can be kept under 3 metres of freshwater for up to 30 minutes in compliance with IP68. The accessory is not designed to float or work submerged underwater outside the IP68 classification range, and such use may lead to your warranty being void.

## Feature list

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<p><b>SmartBand host app</b></p> <ul style="list-style-type: none"> <li>Activity tracking (steps, walking, running)</li> <li>Automatic sleep</li> <li>Do not Disturb mode</li> <li>Find phone*</li> <li>Find SmartBand</li> <li>Google Fit*</li> <li>Heart activity           <ul style="list-style-type: none"> <li>• Pulse (HR)</li> <li>• Stress and Recovery (HRV)</li> </ul> </li> <li>Insights</li> <li>Media remote</li> <li>Notifications</li> <li>Out of range alert</li> <li>Smart Wakeup alarm</li> <li>Stamina mode (HRV on/off)</li> </ul>	<p><b>Lifelog</b></p> <ul style="list-style-type: none"> <li>Body effort (HRV)</li> <li>HRV Insights</li> <li>Pulse (HR)</li> </ul>
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\* This service is not available in all markets.

## Mobile device hardware requirements

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Mobile device hardware requirements

<b>Operating system compatibility</b>	Android version 4.4 or later iOS 8.2 for iPhone 4s and newer only (not compatible with iPads)
<b>Bluetooth</b>	Version 4.0 or later

# Technologies in detail

The information presented in this section is a general overview of the technology incorporated into the product. However, hardware and software levels of compliance to standards and specifications vary between products and markets. For more information, contact Sony Mobile Developer World or your Sony contact person where applicable.

## Device-to-device communications (local)

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### Bluetooth® wireless technology

Bluetooth® profiles supported	Bluetooth Low Energy Generic Attribute Profile
Core version and supported core features	Version 4.0
Supported devices	Products which support the Bluetooth® profiles listed above.

More information:

[www.sonymobile.com/developer](http://www.sonymobile.com/developer)

[www.bluetooth.com](http://www.bluetooth.com)

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