

The RC-S380 product is the world's first reader certified by the NFC Forum Certification Program\*. This product is capable of communicating both with devices that conform to the NFC Forum specifications and with various contactless IC cards, including FeliCa™ and ISO/IEC 14443 Type A / Type B.

\*NFC Forum Certification Program : A program for the purpose of checking products' conformity to the NFC Forum specifications and ensuring compatibility among products. Conformance testing is performed on products submitted to authorized test laboratories with the validated test tools.

# RC-S380



NFC  
Forum-certified

Windows 8

Conforms to  
PC/SC 2.0



## FEATURES

- **NFC Forum-certified products**  
Available for communication with various devices conforming to the NFC Forum specifications.
- **Available for various contactless IC cards**  
Read/Write capability with FeliCa card/FeliCa-compatible devices and ISO/IEC14443 Type A / Type B cards.
- **Compatible with Windows® 8**  
By connecting RC-S380 with Windows 8 PC, users can pair up and exchange data easily with NFC-enabled smartphones.
- **Compliant with various countries' / areas' radio law**  
RC-S380 is compliant with radio law in the following countries / areas.  
USA / Canada / EU / Korea / Hong Kong / Thailand / Malaysia / Singapore / Philippines / Indonesia / India / Saudi Arabia / Brazil / China (China model only)
- **Conforms to PC/SC 2.0 specification**  
PC/SC interface for applications is provided to access FeliCa cards and ISO/IEC14443 Type A / Type B cards.
- **Complies with ISO/IEEE 11073**  
Supports converting the vital data from healthcare products embedded with the NFC Dynamic Tag (FeliCa Plug)

## APPLICATION DEVELOPMENT ENVIRONMENT

The following Software Development Kit (SDK) lineup for various operating environments supports the development of application software to control the reader.

- **"SDK for NFC Lite" for Windows OS**  
Supports application development for ISO/IEC14443 Type A / Type B cards, as well as FeliCa cards / FeliCa-compatible devices and Mobile Wallet Phones (Osai-fu-Keitai) .
- **"SDK for NFC Starter Kit" for Windows OS**  
This free of charge SDK for browsing and evaluation provides a part of function of "SDK for NFC Lite".
- **"SDK for NFC <Reference Implementation>" for embedded devices**  
For other widely-adopted operating systems, such as Linux, reference source code with transplantable C language is provided to develop applications for ISO/IEC14443 Type A / Type B cards, as well as FeliCa card/FeliCa-compatible devices and Mobile Wallet Phones.

<b>RC-S380</b>	
<b>Regulation requirements</b>	<ul style="list-style-type: none"> <li>•Japan : No.: AC-12005</li> <li>•USA : FCC ID: AK8RCS380</li> <li>•Canada : IC Certification No.: 409B-RCS380</li> <li>•Europe : CE R&amp;TTE(1999/5/EC)</li> </ul> As for the other regulation requirements, please contact us.
<b>Communication distance (per card and device)*1</b>	Approx. 5 mm (distance from the external surface of the device)*2
<b>Communication speed (per card and device)</b>	106 kbps, 212 kbps, 424 kbps
<b>Communication method</b>	Compliant with ISO/IEC 18092 (212 kbps / 424 kbps Passive communication mode) Compliant with ISO/IEC 14443 (Type A / Type B)
<b>API</b>	PC/SC Ver. 2.0, FeliCa library
<b>Compatible cards / devices</b>	<ul style="list-style-type: none"> <li>•FeliCa Standard</li> <li>•FeliCa Lite</li> <li>•NFC Dynamic Tag (FeliCa Plug)</li> <li>•Mobile FeliCa IC mobile phone</li> <li>•Pico Pass</li> <li>•MIFARE Classic</li> <li>•MIFARE Ultralight / Ultralight C</li> <li>•MIFARE DESFire / DESFire EV1</li> <li>•MIFARE Plus</li> <li>•Topaz/JEWEL</li> <li>•ISO/IEC 14443 Type A / Type B</li> <li>•ISO/IEC 14443-4 Type A / Type B (T=CL)</li> <li>•NFC Forum Tag 1, 2, 3, 4A, 4B</li> </ul>
<b>Carrier frequency (per card/device)</b>	13.56 MHz (±50 ppm)
<b>Operating temperature / humidity (no condensation)</b>	5 °C to 35 °C / 10% to 90%
<b>Storage temperature / humidity (no condensation)</b>	-20 °C to +60 °C / 10% to 80%
<b>Mass</b>	Approx. 36 g (excluding USB cable)
<b>External dimensions (W x H x D)</b>	Approx. 60 mm x 100 mm x 11 mm
<b>External interface</b>	USB (full-speed)
<b>USB cable length</b>	Approx. 1 m
<b>Operating voltage</b>	DC 5 V (supplied via USB)
<b>Consumption current</b>	Max. 200 mA during operation
<b>Supplied accessories</b>	Instruction manual, cardholder, dedicated stand, USB cable

\*1 Communications distance depends on the peripheral environment. Under ideal conditions, this value is unaffected by electromagnetic waves or metallic substances.  
\*2 Value when placing the card and device with the respective midpoints coinciding to remain on the reader.

Note: Conforming to the RoHS Directive (a European environmental regulation), a halogen-type flame retardant is not used for the printed circuit board. Also, lead-free solder is used and the design is environmentally-friendly.

OPERATIONAL ENVIRONMENTS

For the latest information, see "Products" at [www.sony.net/Products/felica/](http://www.sony.net/Products/felica/).

Operating system	<ul style="list-style-type: none"> <li>• Windows® 8 / 8.1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 8 / 8.1 Pro 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 8 / 8.1 Enterprise 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 7 Starter SP1 32 bit (x86)</li> <li>• Windows® 7 Home Basic SP1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 7 Home Premium SP1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 7 Professional SP1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 7 Enterprise SP1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows® 7 Ultimate SP1 32 bit (x86) / 64 bit (x64)</li> <li>• Windows Vista® Home Basic SP2 32 bit (x86) / 64 bit (x64)</li> <li>• Windows Vista® Home Premium SP2 32 bit (x86) / 64 bit (x64)</li> <li>• Windows Vista® Business SP2 32 bit (x86) / 64 bit (x64)</li> <li>• Windows Vista® Enterprise SP2 32 bit (x86) / 64 bit (x64)</li> <li>• Windows Vista® Ultimate SP2 32 bit (x86) / 64 bit (x64)</li> </ul>
Web browser	<ul style="list-style-type: none"> <li>• Internet Explorer 11</li> <li>• Internet Explorer 10</li> <li>• Internet Explorer 9</li> <li>• Internet Explorer 8</li> <li>• Internet Explorer 7</li> </ul>

• If using a 64-bit operating system, this product is usable only with the 32-bit version of Internet Explorer.  
• Successful operation is not guaranteed on all PCs using the recommended operating systems.  
• The performance of this product depends on the specific combination of hardware and software used, even if the conditions in the previous table are satisfied.

Caution: If this product is placed on a metal surface, there is a chance that it operates improperly, such as being unable to communicate with the card. Therefore, it is recommended to use the device while remaining at least a few centimeters away from metal items such as desks and cabinets and, preferably, using the dedicated stand included with this product.

• Specifications and external appearance are subject to change without prior notice.  
• FeliCa is a trademark of Sony Corporation.  
• FeliCa is a contactless IC card technology developed by Sony Corporation.  
• Other system names and product names described in this catalog are generally registered trademarks or trademarks belonging to their respective development manufacturers. Note that ™ and ® symbols are sometimes purposely omitted from this text.

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