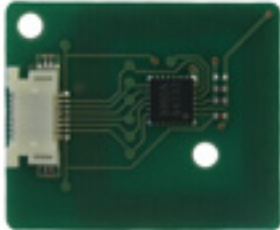


FeliCa RC-S801 NFC Dynamic Tag - 20 x 24mm



The FeliCa RC-S801 NFC Dynamic Tag from Sony is a 20 x 24mm contactless tag interface module that operates at 13.56 MHz in accordance with the NFC specifications. Rather than having any on-board data storage capabilities, it is designed to be integrated into other devices that can provide the tag data on each request, enabling it to return different responses each time it is read.

Also known as the FeliCa Plug, the NFC Dynamic Tag is suitable for a wide range of applications in various markets including healthcare, factory automation, smart meters and consumer electronics. It enables transfer of data between NFC phones/readers and electronic equipment and gadgets, without needing to use complex peer to peer (P2P) mode communications.

The module is equipped with a simple cable interface which can be controlled using a low-speed host CPU, and has a wireless field detection circuit that enables the host to be woken from sleep mode as soon as the reader field is detected. The tag module itself has a standby current consumption of 0.1uA or less, making it highly suitable for use in battery-operated devices.

Products that already use this technology include:

- A pedometer that transfers walking data to a PC or NFC phone when touched
- A glucose meter that transfers daily blood glucose data to a PC when placed over a USB reader

- A blood pressure monitor that sends data to an online healthcare management system via an NFC mobile phone.

The module is fully NFC Forum type 3 compliant and can operate at a distance of up to 10mm depending on the power provided by the NFC enabled device.

The FeliCa RC-S801 module is supplied as a 20 x 24 x 2.95mm PCB with two mounting holes and an 8-way flexible flat cable connector. Full documentation and open source code samples for the Arduino prototyping platform are available on request.

Pricing is per module.

Unique module for enabling electronic devices to act as intelligent NFC tags. 20 x 24 x 2.95mm.

To buy, visit:

<https://www.smartcardfocus.com/shop/ilp/id~581/felica-rc-s801-nfc-dynamic-tag-20-x-24mm/p/index.shtml>

This Product Briefing has been produced by Dot Origin Ltd, the smart card experts behind SmartcardFocus.com. If you have a query email sales@smartcardfocus.com or call us on +44 (0)1428 685250.

FeliCa RC-S801 and RC-S802 NFC Dynamic Tags

Technical Specification

Operating distance: RC-S801: 10mm (when using RC-S320/S330); RC-S802: 10mm (when using RC-S320/S330)

Temperature/Humidity: 0C - 40C (32F - 104F)/20%RH - 90%RH; 40C - 50C (104F - 122F)/50%RH or less

External dimensions: RC-S801: 20 x 24 x 2.95mm; RC-S802: 11 x 19.5 x 2.95

Mass: RC-S801: Approx. 0.73g; RC-S802: Approx. 0.45g

Operating voltage: 1.8V - 3.7V

Consumption current: Operation mode: 1mA or less (no load); Standby mode (RF non-detection): 0.1 uA or less

Connector: FPC/FFC 8-pole bottom connection type, pitch: 0.5mm; Applicable FPC/FFC thickness: 0.3mm

Contactless interface

Standards: ISO/IEC 18092 (212kbps passive mode)

Operating frequency: 13.56 MHz

Modulation: ASK modulation

Bit coding: Manchester encoding system

Communication speed: 212 kbps

Cable

Communication method: Three-wire half-duplex serial interface (Sony specification)

Communication speed: Dependent on host CPU (Max. 1 Mbps)

Manufacturer: Sony

