The RC-S620/S is a compact NFC reader module. Available with UART interface and suitable for incorporating into various devices, such as consumer devices, embedded system devices, and so on.

**RC-S620/S**
UART Interface

### FEATURES

**NFC functionality**
Reader/writer function for ISO/IEC 14443 Type A / Type B cards and FeliCa cards.

**Compact design with integrated antenna**
The antenna and control parts are mounted on a single printed-circuit board with dimensions of 70 mm x 43 mm. This design is less prone to the impact of the installation environment when embedded, and can therefore be embedded in various devices.

**High-speed communication (424 kbps)**
In addition to 212 Kbps, high-speed communication of 424 kbps is available to communicate with the mobile FeliCa IC chip or FeliCa cards with 424 kbps capability.

### APPLICATION DEVELOPMENT ENVIRONMENT

**SDK for NFC <Reference Implementation> for embedded systems (optional)**
The SDK supporting FeliCa and ISO/IEC 14443 Type A / Type B communication is available as application software development tool for the host controller. For details of the SDK for NFC, see the relevant brochure or product information on the FeliCa website.

### MAIN TARGET DEVICES

- PC
- PC peripheral devices
- AV devices
- Access control readers
- Loyalty point / membership card terminals
### PRODUCT SPECIFICATIONS

| **Regulation requirements** | [Japan] No.: AC-09001  
[USA] FCC ID : AK8RC620S  
[Europe] CE RE (2014/53/EU)  
For details of other regulation requirements, please contact us. |
|----------------------------|---------------------------------------------------------------|
| **Communication method**   | Conforms to ISO/IEC 18092 (212 kbps, 424 kbps Passive communication mode)  
Conforms to ISO/IEC 14443 Type A / Type B |
| **Communication distance** | Approx. 20 mm |
| **Carrier frequency**       | 13.56 MHz |
| **Communication speed (per card and device)** | 106 kbps *1, 212 kbps, 424 kbps *2, 424 kbps *3 |
| **External interface**      | UART 9.6 kbps – 460 kbps  
(Initial speed at power-on is 115 kbps: speed can be changed on command) |
| **Operating temperature / humidity** |
| (no condensation) | -10 °C to +40 °C / 20%RH to 90%RH  
40 °C to 60 °C / 50%RH or lower |
| **Storage temperature / humidity** |
| (no condensation) | -30 °C to +70 °C / 60%RH or lower |
| **Mass**                    | Approx. 17 g |
| **External dimensions (W × H × D)** | 70 mm × 3.1 mm × 43 mm |
| **Operating voltage / Consumption current** |
| (during operation) | DC 3.3 V / Max.100 mA or DC 5.0 V / Max.100 mA |

*1 The communication distance depends on peripheral environment. Under ideal conditions, this value is unaffected by electromagnetic waves or metallic substances.  
*2 When using ISO/IEC 14443 Type A / Type B cards.  
*3 Available only when the card or device to be used is compatible with the 424 kbps transfer mode.  
*4 Function assurance temperature.  
*5 While this product does not contain any encryption processing functions, access to a secure area on a card may be realized via communication with an encryption server.  
*6 Please take any measures necessary to comply with the laws and regulations of each country and region where the product is to be marketed.

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