

## Data Sheet

# HF Reader System Series 6000 S6110 Reader Module



## Specifications:

| Part number   | RI-R00-321A   |
|---|---|
| Operating Frequency   | 13.56 MHz   |
| RF power output   | 100mW to 1.1W (adjustable)  |
| Power change over operating temperature range                     | 2dB max.  |
| Antenna bandwidth   | 1MHz @ -3dB   |
| Antenna Impedance   | 50 Ohm @ 13.56 MHz  |
| Return loss   | 20dB or better (VSWR<1:1.1222)  |
| Maximum antenna cable length                                      | 15 meters   |
| Transmitter modulation  | Pulse width coded,<br>AM 100%; on-off ratio > 40dB  |
| Receive frequencies and bit modulation                            | Manchester coded<br>A = $f_c \pm 423.75$ kHz, B = $f_c \pm 484.29$ kHz<br>Low bit: transition A to B<br>High bit: transition B to A |
| Receiver sensitivity  | Better -60dBm @ 20dB S/N; bit error rate $10^{-4}$  |
| Operating Voltage   | 12V $\pm$ 5%  |
| Typical Current Consumption<br>(12V, 25°C, RF power output 800mW) | Active: 850mA<br>Stand-by (transmitter off): 650mA  |
| Flash EEPROM  | 32k x 16  |
| S-RAM   | 4.5k x 16   |
| Communication Interface   | RS232; 9-pin, Sub D (male)  |
| Communication Protocol  | Tag-it Host Protocol  |
| Operating Temperature   | -20°C to +55°C (including self-generated heat)  |
| Storage Temperature   | -40°C to +80°C  |
| Vibration   | Suited for static applications  |
| Dimensions  | 160mm x 73mm x 43mm   |
| Weight  | 220g  |

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: <http://www.ti-rfid.com>

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