



FS-GM102

– FAVITE R2000 UHF RFID Reader module

FS-GM102, one of FAVITE RFID reader module family, is a powerful and smaller size design for mobile reader device. The FS-GM102 is embedded with Impinj R2000 chipset and its sensitivity is 12dbm better than those readers based on R1000, with 40% more reading distance. And, it is compliant with EPC Class1 Gen2 Dense Reader mode (DRM) / ISO 18000-6C. RFID system integrator (SI) could embed FS-GM102 module in own product with the benefits of operate stability with premium RFI performance.



Key Feature

- › Impinj R2000 embedded
- › Compliant with EPC Class1 Gen2
- › Support EPC Dense Reader Mode (DRM)
- › Compliant with ISO 18000-6C
- › Long reading distance
- › Support single antennas
- › Adjustable output power
- › Low Power Consumption
- › FCC/ETSI Certification
- › Powerful

Application

- › Mobile reader
- › Logistic inventory
- › Warehouse management
- › Assets tracking
- › Cargo tracking
- › Baggage handling
- › Access control
- › Large-scale RFID system implement

System

Host Interface	Connector (USB / UART / Reset / GPIO / SAMBA / DC in / GND)
Chipset	PHY: Impinj R2000 / MAC: ATMEL AT91SAM7S-256
Operating Voltages	4.2~3.4V
DC Power	1.7A @ 30dBm

Protocol

RFID Protocol Support	EPC Gen 2 / ISO 18000-6C
Support EPC DRM	N/A

RF Features

Frequency	US: 902 ~ 928MHz / EU: 865 ~ 868MHz / SRRC: 920~925MHz / JP:952~954MHz / NCC: 922-928MHz.
Demodulation	ASK or PSK
Modulation Depth	90% nominal
Data Encoding	FM0 or Miller code
Bit Rate	Supports uplink data rates of up to 400 Kbps
TX Output power	5 ~ 30dBm in 1dB step
Antenna Type	1 Port Mono-static
Antenna connector	U.FL Ultra-Miniature Coaxial Connector

Regulatory and Environmental Compliance

EMC certification	FCC 47 CFG Ch.1 Part 15 (US) / ETSI EN 302 208-1 (V1.1.1 / EU)
Temperature Range	Operating: 0 ~ 55 degree C / Storage: -20 ~ 85 degree C
Humidity	10% ~ 85% Non-condensing

Software

Driver	Windows XP / Linux
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Mechanical

Dimension	50mm x 40mm x 4mm ± 1mm
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Doc.No.: FS-GM102-20090409-V1-1

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