FS-GH102
– EPC C1 Gen2 RFID Handheld Reader

The FS-GH102 RFID handheld reader provides mobile workers throughout the supply chain with complete data capture functionality and real-time connectivity to critical business applications. It could read RFID tags, and capture 1D and 2D barcodes, ensuring seamless integration throughout the enterprise — even when multiple types of product identification and tracking systems are deployed. The FS-GH102 is embedded with Impinj R2000 chip for its reader module and compliant with EPC Class1 Gen2 Dense Reader mode (DRM) / ISO 18000-6C. And its sensitivity is 12dbm better than those readers based on R1000, with 40% more reading distance. With its powerful RFID reader performance, FS-GH102 meets wide range of mobile application and increases the productivity of today's fast decision-making environment.

Features

- Marvell PXA270 Processor at 520 MHz with 128 MB SDRAM / 1GB FLASH ROM memory
- 3.5" 240x320 QVGA 256-color TFT-LCD Touch Screen with LED Backlight
- Impinj Indy R2000 Reader chipset embedded
- Compliant with EPC Class1 Gen2 / ISO 18000-6C
- Supports EPC Dense Reader Mode(DRM)
- RF output power up to 30 dbm
- Internal antenna, 2dbi linear polarization
- Up to 7M reliable long reading range based on 4" x 1" Tag
- Supports 1D and 2D bar code scanning
- Integrated WiFi 802.11 b/g + Bluetooth + GPRS/EDGE
- IP65 sealing rating
- API (Application Programming Interface) for Microsoft Windows CE.NET 5.0, C#, Java, Java Script
- Lightweight (470g), without pistol grip design
- 4000mAh battery for 8-hour normal operation

Applications

- Inventory management
- Item identification
- File and Document Tracking
- Asset Management
- Patient Tracking
- Work In Process (WIP)
- Logistic Control

Physical and Environmental Characteristics

Dimensions	155mm L x 82mm W x 44 cm H
Weight	470g (includes battery, scanner)
Keyboard	12-Key Numeric Keypad
	26-key Alpha-numeric Keypad (option)
	Power Button x 1,
	Barcode Scanner Buttons x 3,
	Application Buttons x 4,
	Navigation Buttons x 3,
	Control Buttons x 5,
	Reset Button x1, Reserve Hotkey x1
Display	3.5" 240x320 QVGA 256-color
	TFT-LCD with LED Backlight.
	4-wire Resistance Type Touch Panel.
Power	Removable, rechargeable 3.7 volt Li-Ion
	4000 mAh battery pack.
	Power Adapter: 100~240VDC,
	50/60Hz Input, 5VDC/2.6A Output.

Performance Characteristics

CPU	Marvell PXA270, processor at 520 MHz
Operating System	Microsoft Windows CE.NET 5.0
Memory (RAM/ROM)	128 MB SDRAM / 1GB FLASH ROM
Expansion	SD/MMC card
Bar Code Options	Omni-directional 1D and 2D imaging engine reads symbologies and captures grayscale images and signatures with intuitive laser aiming.

RFID

Standards supported	EPC C1 Gen2
RF Chipset	PHY: Impinj R2000 IC Chip
	MAC: ATMEL AT91SAM 7S-256
Frequency Range	US: 902 ~ 928MHz,
	EU: 865 ~ 868MHz
Output Power	30dbm (1W EIRP)
Internal Antenna	2dbi, linear polarization
Nominal read range	Up to 7M

User Environment

Operating Temp	-10°C to 50°C
Charging Temp	0°C to 40°C
Humidity	5% to 95% non-condensing
Drop Spec	Multiple drops to concrete: 5 ft./1.5 m
Tumble	2,000 one-meter tumbles at room temperature (4,000 hits)
Environmental Sealing	IP65 (electronic enclosure, display and keypad)
Electrostatic Discharge (ESD)	±15kVdc air discharge; ±8kVdc direct and indirect discharge

Radio Communications

WLAN	802.11 b/g
Optional	GPRS module
Data Rate	802.11b: up to 11 Mbps; 802.11g: up to 54 Mbps

Optional Accessories

Cable	RS232 Cable for Terminal, USB Cable for Terminal
Charger	4-Slot battery charger, 5V/ 6.5A
Other Accessories	GPS Module Car Adapter Vehicle Mount Dock

Regulatory

Electrical Safety	UL/cUL, LVD, CB
EMI/RFI Radio	FCC or ETSI

Warranty

The FS-GH102 RFID Handheld reader is warranted against defects in workmanship and materials for a period of one year (12 months) from date of shipment, provided the product remains unmodified and is operated under normal and proper conditions.