Specification Data

Job Name	
Type	
Catalog #	
Comments	

WIRELESSLY CONNECT, CONTROL, AND MONITOR

PRODUCT OVERVIEW

The RF520UF1 is an IEEE 802.15.4, low-power, highly reliable solution for embedded wireless control and monitoring networks requiring high data rates. It embeds Synapse's SNAP OS, a wireless mesh network operating system, into the Silicon Labs Mighty Gecko EFR32MG12 single-chip 32-bit ARM® Cortex®-M4 core with an integrated transceiver that delivers up to 250Kbits/sec. The Mighty Gecko SoC also includes an integrated power amplifier and LNA for increased range.

KEY FEATURES:

- Integrated On-board Compact F Antenna or U.FL connector for External Antenna
- SNAP auto-forming, auto-healing Mesh Network
- Up to 250 kbps radio data rate
- 2.4 GHz RF Frequency, License-free band
- Spread Spectrum (DSSS) technology
- Solder-able or socket-able
- Secure over-the-air software upgrades
- Secure AES128 Encryption
- Supports Low power/Sleep mode down to 1.55 uA

Product #	Description
RF520UF1	SNAP Radio Module

Dimensions	1.34" x 1.34" (34mm x 34mm)
Operating Temp	-40°C to 85°C
Radio	SNAP 2.4GHz; 802.15.4 +19dBm Transmit power -102dBm Receive Sensitivity
Range (Line of Sight)	Up to 500 feet (Integrated Antenna), or up to 2000 feet (External Antenna)
Processor	32-bit ARM® Cortex®-M4 core with 40 MHz maximum operating frequency
IO	20 total; 19 that can be used as GPIO, ADC, or PWM
Memory	1MB flash, 64KB free for over-the-air uploaded User Apps; 4K internal EEPROM
UARTs	2 ports
Input Voltage	2.0 to 3.6VDC
Certifications	FCC/IC
Warranty [1]	1 Year

RADIO

To learn more call, or visit:
synapsewireless.com (877) 982-7888

Footnotes:
1. See www.synapsewireless.com/warranty for warranty term