# imall

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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **SNAPstick 220 USB to SNAP Bridge**

## SNAP Network Access from a USB Port

The SNAPstick 220 provides a USB connection between your computer and a SNAP wireless network. It contains an SM220 SNAP module, and has a user programmable multi-color LED for custom applications.

The SNAPstick 220 is powered by the Synapse SNAP network operating system. The SNAP operating system automatically networks SNAP nodes to create a common communications infrastructure for Internet of Things (IoT) solutions.

The SNAPstick 220 is an integral part of a SNAP development environment, and is the link between a SNAP network and the Synapse Portal development environment. Portal is a free, comprehensive, development and administration tool for SNAP networks that transforms your computer into a node within a SNAP wireless network, allowing it to participate as a peer or Internet gateway for connected nodes.



## **Product Highlights**

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- Up to 2Mbps radio data rate
- Small form factor
- Powered by SNAP Network **Operating System**

#### The SNAPstick 220 is ideal for:

- **SNAP** application development
- Data sniffing
- Deploying application scripts to remote nodes
- Managing and configuring SNAP nodes
- Troubleshooting SNAP networks

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116-121513-021-D000

#### SNAPstick 220 Specifications\*

Performance	SNAP module	SM220	
	Transmit Power Output	up to +20 dBm	
	RF Data Rate	250Kbps, 500Kbps, 1Mbps, 2Mbps	
	Receiver Sensitivity	-103 dBm (1% PER, 250Kbps)	
General	Frequency	ISM 2.4 GHz	
	Spreading Method	Direct Sequence (DSSS)	
	Modulation	O-QPSK	
	Dimensions	2.78" x 0.9" x 0.35" 7 cm x 2.29cm x .89cm	
	Operating Temperature	32 - 158 deg F. 0 to 70 deg C.	
	Weight	13 grams	
Networking	Topology	SNAP	
	Error Handling	Retries and acknowledgment	
	Number of Channels	15 channels. To avoid exceeding FCC limits, channel 15 operates in a receive only state.	
Agency Approvals	FCC Part 15.247	FCC ID: U9O-RF220UF1	
	Industry Canada (IC)	7084A-RF220UF1	

#### **Orderable Part Number Information**

Part Number	Description
SN220-001	SNAPstick 220 USB to SNAP Bridge Device



\* at 23° C and 3.3V unless otherwise noted

The SNAPstick 220 was designed to primarily act as a bridge device. The only user-accessible GPIO is connected to the multi-color LED, controlled by SNAP GPIOs D1, D2, and D3.

LED State	D1	D2	D3
Off	High (True)	High (True)	High (True)
Red	Low (False)	High (True)	High (True)
Green	High (True)	Low (False)	High (True)
Blue	High (True)	High (True)	Low (False)