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

- 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
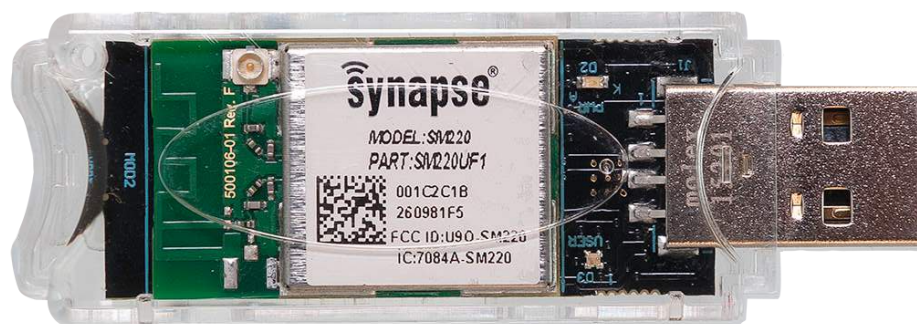
6723 Odyssey Drive // Huntsville, AL 35806
(877) 982-7888 // Synapse-Wireless.com

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

* at 23° C and 3.3V unless otherwise noted

Orderable Part Number Information

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

User-controllable RGB LED

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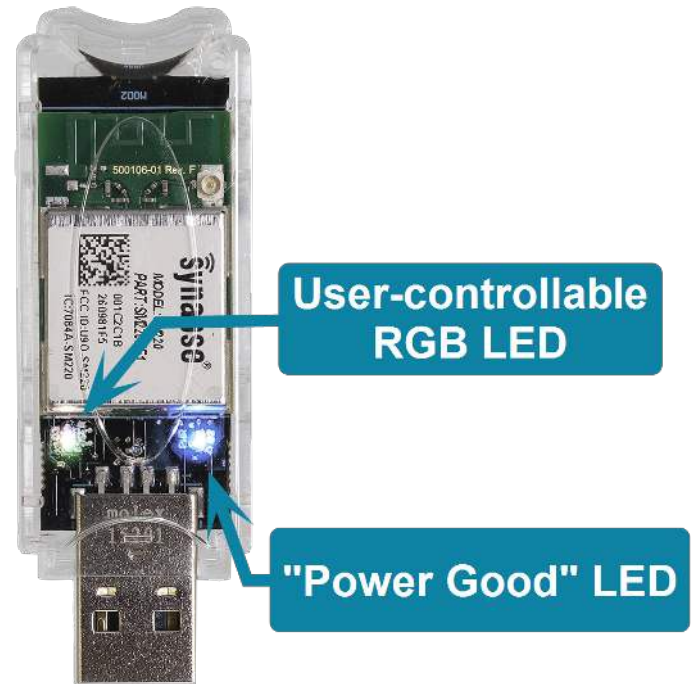
The SNAPstick 220 was designed to primarily act as a bridge device. The only user-accessible GPIO is connected to the multi-color LED, controlled by SNAP GPIOs D1, D2, and D3.

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)