



## Quickest, Easiest Way to Integrate Standard-Based Wireless

### Low-Power, Standard-based Wireless Platform

Helicomm's highly integrated IP-Link 3000 & 3200 USB dongles comes in IEEE802.15.4-compliant 915MHz or 2.4GHz versions to support regional or global deployment. Along with Helicomm's IP-Net™ Networking Software, IP-Link USB Dongles support both the new ZigBee protocol and our custom mesh networking solutions. These FCC certified IP-Link USB Dongles are designed for reliability and manufacturability, making an easy and quick path to standard-based wireless networking.



IP-Link 3000& 3200 dongles support Star, Cluster-Tree and Mesh Topologies

### Give Your Products the Power of Communications

IP-Link 3000 & 3200 allow you to reliably and cost-effectively communicate with your products. By wirelessly networking your products, you can understand product status, equipment condition and usage history, you can update software and run remote diagnostics to enhance

functionality, you will have the power and flexibility to configure, provision and deploy point-to-point star, cluster-tree and mesh networks.

### Integrate Highly Reliable & Secure Data Networking

Helicomm's IP-Link 3000 & 3200 provide high reliability in residential and commercial environments – even in the presence of significant RF interference. Our USB dongles support a suite of security services, including powerful 128-bit encryption to protect data transmission, packet freshness timers to protect against message spoofing, and access control lists to create closed user groups that reject unauthorized messages.

### Convenient Plug & Play Connectivity

IP-Link 3000 & 3200 USB Dongles function with an industry-standard USB interface, allow a desktop or laptop with USB port to wireless communicate with each other. You can install IP-Link 3000 & 3200 without the need to open your PC to add any plug-in boards. Just plug the IP-Link Dongle into USB port, Windows will automatically identify the dongle and install the necessary driver or software. IP-Link USB Dongles are powered directly from



IP-Link 3000 & 3200 Networking USB Dongles available in 915MHz or 2.4GHz

USB ports, eliminate unnecessary wire or cable.

### Ideal for Remote Monitoring and Control Applications

IP-Link 3000 & 3200 USB Dongles are ideally suited for a wide range of remote monitoring and control applications across a wide array of markets. Examples include Building Automation, Home Automation, Medical Monitoring, Environmental Monitoring, Traffic Data Acquisition, Access Control and Automated Meter Reading. IP-Link 3000 & 3200 can be easily installed onto a wide range of products to minimize data acquisition cost and extend the functionality of an existing product.

*Helicomm's IP-Link 3000 & 3200 USB Dongles are now shipping. The complete Product IDs are as following:*

915MHz: IP-Link 3000-1041  
2.4GHz: IP-Link 3210-2041



IP-Link 3200 USB Dongle

### Main Features

- ❖ **Worldwide license-free frequencies**  
Select from 915MHz or 2.4GHz
- ❖ **Very low power consumption**  
Module transmit power <35mA
- ❖ **USB port accessible by customer**  
Industry standard interface
- ❖ **Three Viewable LEDs**  
Power and signal status indication
- ❖ **Small form factor**  
Module: 1.2" x 0.9" x 0.4"  
Device: 3.2" x 1.2" x 0.5"
- ❖ **Highly integrated networking platform**  
Radio, micro-controller, antenna, software
- ❖ **Point-to-Point or Multipoint-to-multipoint**  
Flexible configuration options
- ❖ **Easy Installation**  
Convenient plug and play
- ❖ **Easy-to-use interface**  
IP-Net™ embedded networking software

### IP-Link 3000 & 3200 Specifications

	915MHz IP-Link 3000	2.4GHz IP-Link 3200
<b>RF</b>		
Frequency	915MHz unlicensed ISM band	2.4GHz unlicensed ISM band
Modulation	FSK	DSSS
Max.data rate	76Kbps	250 Kbps
Receive Sensitivity	-96dBm	-94dBm
Transmit range	150m(LOS)	100m (LOS)
RF channels	7	16
Transmit power	-20dBm to 0dBm	-24dBm to 0dBm
Data encryption	56-bit AES	128-bit AEZ
Certification	FCC	FCC
<b>Power Consumption</b>		
Transmit	32mA	35mA
Receive	27mA	30mA
Sleep	<250uA	<15uA
<b>Microcontroller</b>		
Type	8051- Compatible	AVR
<b>I/O</b>		
Physical pins	USB	USB
Serial	RS232	RS232
A/D	3 Channel, 10-bit	3 Channel, 10-bit
Control	Input, Reset	Input, Reset
<b>Physical / Environmental</b>		
Size W x H x D		
Inches	3.2 x 1.2 x 0.5	3.2 x 1.2 x 0.5
Cm	8.0 x 3.0 x 1.5	8.0 x 3.0 x 1.5
Operating temp.	-20°C to +70°C	-20°C to +70°C
Humidity	10% to 90%	10% to 90%