FreeStyl SIP

Long-Range Cordless Phone and Two-Way Radio System

The FreeStyl SIP long-range cordless phone and two-way radio system is ideal for businesses and homes where people are on the move in large environments. In areas where cellular or Wi-Fi coverage is poor, non-existent, or impractical, the FreeStyl SIP can provide quality, long-range voice communication for both telephone and digital two-way radio.

SIP technology allows the FreeStyl SIP to be used with an IP-PBX or a hosted SIP provider service. Unlike other SIP Wi-Fi cordless phones, the FreeStyl SIP uses the 900 MHz spectrum, which places no additional demands on Wi-Fi bandwidth being used by laptops, tablets, cell phones, scanners and other IoT devices. Using 900 MHz with frequency hopping and digital spread spectrum helps makes communications clear and more secure.

The FreeStyl SIP model was developed by the leading manufacturer of long-range industrial voice communications and shares many of the same top features of models costing two to three times as much. With the FreeStyl SIP, you can enjoy SIP-technology cost savings and still have clear, long-range communication from virtually anywhere on your property.

Long Range SIP Cordless Phone & Two-Way Radio

VoIP SIP connection
FreeStyl SIP supports the VoIP SIP interface, allowing you to connect the base station to the internet via an IP-PBX or a preferred hosted SIP service provider.

Features & Benefits

- Long Range SIP Cordless Phone & Two-Way Radio
- Long range up to
    - › 10 acres (open area)
    - › 100,000 sq. ft. (retail/ warehouse)
    - › 25,000 sq. ft. (office / hotel)
- 902 ~ 928MHz FHSS
- Two (2) concurrent phone calls
- Expands up to 10 handsets
- Independent, digital handset broadcast & intercom
- Optional outdoor or ceiling mount base unit antenna kits

Extreme Long-Range Performance

FreeStyl SIP implements EnGenius proprietary air protocol, with high RF transmission and sensitivity, providing superior range and coverage for large areas with minimal infrastructure requirements. Coverage up to 100,000 sq. ft (retail/warehouse), 25,000 sq. ft. (office/hotel), or 10 acres (farm/ranch).

Wi-Fi Bandwidth Avoidance

Adopting 900MHz (902~928MHz) allows the FreeStyl SIP to avoid competing for Wi-Fi bandwidth. By using 900 MHz the wireless voice communications does not compete for Wi-Fi bandwidth with laptops, cell phones, security cameras, scanners and other IoT devices.

900 MHz Benefits

900MHz (902~928MHz) allows for improved coverage by utilizing a lower unlicensed frequency and FHSS (frequency hopping spread spectrum) technology provides security during conversation.

Multiple Usage

Expandable to 10 handsets and 10 SIP accounts.

Independent 2-Way Intercom

FreeStyl SIP provides direct handset to handset communication without going through the phone base station. Intercom communication connects directly from one handset to another without having to push-to-talk. FreeStyl SIP's intercom can be used even if outside the range of the phone base or if the base power is out.

Handset Broadcast

The FreeStyl SIP's built-in broadcast function allows one-way, "Push-to-Talk" communication, independent of phone base unit. Broadcast a message to all handsets or a just a select group of handsets. The handset's broadcast will function outside the range of the base unit or if the phone base's power is down.

Minimal Infrastructure

By using long-range 900 MHz technologies, the FreeStyl SIP require significantly less infrastructure than Wi-Fi or DECT phone systems. This can result in overall cost savings with equipment, installation, and upkeep.

Features & Benefits

Long-Range communication up to

- 25,000 Sq. Ft. in an Office or Hotel Environment
- 100,000 Sq. Ft. in a Retail Store or Warehouse
- 10 Acres of Open Area like a Farm or Ranch

System

- 900MHz
- Single-Base Architecture
- Compatible with DuraFon SIP
- SIP Account x 10
- Simultaneous Call x 4
- 1 LAN Port
- Multi-Handset up to 10
- Removable Base and Handset Antenna
- Standard SIP Protocol Connection
- Secure, Digital Spread Spectrum w/Frequency Hopping Technology

SIP

- Voice Codec: G.711a, G.711u, G.729A
- SIP Protocol: RFC3261
- DTMF: RFC2833, SIP INFO
- Hold: RFC3264
- Transfer: RFC3515, RFC3891, RFC3892
- Support Outbound Proxy
- DNS SRV Support

Handset

- Long Range Cordless Handset
- 900 MHz, DSS, Frequency Hopping
- 2-Way Radio: Broadcast & Intercom
- User Handset Naming
- Keypad Lock
- Speakerphone
- Caller ID

Features & Benefits

Handset (continued)

- Vibrate Mode
- 2.5 mm Headset Jack
- Call Logs – Dialed & Received
- Redial
- Speed Dial
- Call Hold
- Call Transfer
- Wireless PBX Function Sharing
- Wireless Phone Book Sharing
- Silent Ring
- Mute
- Selectable Handset Grouping (7 groups)
- User Programmable PBX Functions
- Phone Book Supports 50 Entries
- Intercom (Handset-to-Handset), No Group Chatter
- PTT Broadcast (One-to-Many)

Battery and Charger

- Li-Ion Technology
- 6-Hours of Talk Time
- 50-Hours of Stand-By Time
- Desktop Handset Charger
- 3-Hour Recharge Time
- Battery Hot-Swap While Call is On-Hold

Button

- Left & Right Soft key
- Up
- Down
- Talk/Flash
- Speaker
- Phonebook
- CID/Hold

- 2-Way Intercom
- End & Power
- Broadcast
- 0 ~ 9

Jack

- Earphone

LED

• Power

• In-Use

Button

• Page

• Reset

Jack

• LAN x 1

• AC Adaptor Port

Technical Specifications

Electrical Specifications	Base Station	Portable Handset
Frequency RF Power	902-928 MHz Peak: 27 dBm / Average: 21 dBm	902-928 MHz Peak: 26 dBm / Average: 20 dBm
Channel Spacing	200kHz	200 kHz
Number of Channels	128	128
Modulation	MSK	MSK
Multiple Access	Frequency Hopping TDMA	Frequency Hopping TDMA
Frequency Hopping Rate	100 per second	100 per second
TDMA Frame Length	10 ms	10 ms
Number of Slots/Frame	4	4
Receiver Sensitivity	< -108 dBm (@ BER 10-2)	< -108 dBm (@ BER 10-2)
Antenna Connector	Reverse TNC	Non-standard
Antenna Gain	2 dBi	1.5 dBi (short antenna) 2.5 dBi (long antenna)
TX Power Control Range	19~27dBm	19~26dBm
Internet Interface	RJ45 x 1	NA
Speech Coding	8 kbps G.729AB	8 kbps G.729AB
Channel Coding	8 kbps Convolutional + CRC	8 kbps Convolutional + CRC
Transmission Data Rate	170.667 kbps	170.667 kbps
User Data Rate	64 kbps duplex	64 kbps duplex
Duplex	Time Division Duplex (TDD)	Time Division Duplex (TDD)
No. of System ID	65,536	65,536
Ring Signal	20-50 Hz, 30-90 Vrms	NA
Power Source	AC/DC 100~240V/5V,1A SW Adapter	3.7V/1100 mAh Li-Ion Battery Optional: 3.7V/1700mAh
Charger Current	NA	550 mA
Charge Time	NA	3 hours
Regulation Compliance	FCC Part 15/ IC	FCC Part 15 Hearing Aid Compatible/ IC
Operating Temperature	0 – 50 C	-10 – 60 C
Storage Temperature	-40 – 70 C	-40 – 70 C
Humidity	20 – 75 %	20 – 75 %