

## FREQUENTLY ASKED QUESTIONS

### **1. What is the Panasonic TGP500 series SIP Cordless Phone System?**

Internet based telephony used to mean sitting at a single location desk station to use a SIP internet protocol telephone. But that is no longer the case for quality, on-premise, mobile telephony. The Panasonic TGP500 series SIP Cordless Phone System is the seamless marriage of the pure wireless call quality of DECT 6.0 with the efficient, productive features provided by the open source standard of SIP call delivery and call control.

Packed with business features, it is a “system in a box” for small businesses or the perfect mobility device for your larger SIP endpoint deployments. SIP not only means reduced hardware costs but also the potential for huge savings on your monthly phone bills. Since the SIP Cordless Phone System is expandable, you can quickly and easily add up to 6 cordless handsets to a single base station.

### **2. What is DECT?**

DECT or **D**igital **E**nhanced **C**ordless **T**elephone is a cordless telephone standard recognized around the world. **DECT** phones connect to a base station, usually within a residence or commercial location, using a wireless radio within the handset utilizing a specific range of airwave frequencies. The base station acts as the gateway to the telephone fixed network. DECT is used globally because of its clear call quality, ability to expand with multiple handsets connecting to a single base, interference free from other devices which omit wireless frequencies (i.e. Microwave ovens, baby monitors, WiFi, and cell phones), ability to make internal handset-to-handset intercom calls, extended range and propagation, and extended battery life and talk times. The KX-TGP base station supports up to six (6) wireless DECT handsets.

### **3. How does DECT 6.0 differ from DECT?**

DECT 6.0 is the standard established in the USA as approved by the Federal Communications Commission (FCC) while DECT is widely in use elsewhere throughout the world. DECT 6.0 operates on a specific set of wireless airwave frequencies made available by the FCC for use in the USA. That range is specifically 1920 MHz to 1930 MHz or more commonly referred to as 1.9 GHz.

### **4. Is DECT the same as WiFi?**

No. DECT as a wireless telephone standard was designed with voice in mind. WiFi is a wireless network standard originally designed for data use. As a result, DECT provides robust voice features such as high call clarity, larger range than WiFi access points,

greater talk time and better life, paging, intercom, handset-to-handset calls and many other voice related benefits. WiFi has been used to carry voice over networks; however, VoWiFi as it is called carries heavy overhead on each data packet, needs specialized software to manage network authentication, authorization and accounting, and is subject to latency, jitter and dropped audio sound.

**5. Does WiFi interfere with DECT 6.0 and does DECT 6.0 interfere with WiFi?**

No. DECT and WiFi use different frequency ranges. The FCC allocated the 1.9 GHz frequencies for DECT 6.0 while WiFi b/g/n utilizes 2.4 GHz, thus avoiding interference.

**6. How much network bandwidth will the SIP Cordless Phone System use?**

The KX-TGP telephones support a wide range of SIP Codecs including *Wide Band Audio G.722*. Codecs vary by the size of data packet sent out over network bandwidth. The KX-TGP administrator will determine and select the appropriate Codec for use with your bandwidth. Typically, your network will experience the following bandwidth demands from each supported Codec:

Supported Codecs

G.722 Wide Band Audio

G.711 u-law

G.711 a-law

G.726

G.729a

**7. What is the wireless range of the KX-TPA50 handset?**

DECT 6.0 (Digital Enhanced Cordless Telecommunications) technology lets you move freely around your office with long range and amazingly clear sound. Though performance will vary on conditions, typical range is 300 meters outdoors and 100 meters indoors.

**8. Can the DECT 6.0 wireless range be extended?**

Panasonic KX-TGP DECT 6.0 wireless range extenders (repeaters) will be available for later release.

**9. How expandable is the SIP Cordless Phone System?**

The system is highly expandable. You can quickly and easily add up to six (6) cordless handsets – and each having its own DID number. All you will need is a simple power outlet for each additional wireless handset.

**10. Does the KX-TGP register to any brand of SIP carrier or PBX hardware?**

The KX-TGP telephone systems support the SIP standard which is an open source telecommunications standard. Thus, the KX-TGP should register with most SIP carriers

or premise based hardware PBX systems as long as the SIP register credentials are provided to the KX-TGP administrator.

**11. Is the KX-TGP tested and certified on any SIP PBX hardware?**

Yes. The KX-TGP telephones are fully tested and certified with both Asterisk® and BroadSoft's BroadWorks R15.

**12. Does the KX-TGP support QoS?**

Yes. The KX-TGP telephone system supports DSCP and layer 3 TOS.

**13. How long are the wireless handset's standby and talk times?**

The KX-TGP DECT 6.0 wireless handsets provide up to 5 hours of talk time and ten (10) days of standby time.