

# SGX20000 Gateway

SGX20000 is carrier-grade trunk gateway product for the carrier to provide IP trunk, radio over IP and fax services through the IP networks such as LL, MPLS. It can be connected to the traditional radio system or PBXs via E1 interface to provide the voice solutions for Large enterprises, Government, and SME. It supports G.711/G.723/G.726/G.729 codec calls and T.38/Pass-through Fax.

## HIGHT LIGHT

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- ◆ *20E1 up to 63E1 ports*
- ◆ *Open Architecture*
- ◆ *SIP Standard*
- ◆ *1+1 Power Supply*
- ◆ *SIP/TCP support  
(for Lync Server)*
- ◆ *Flexible Routing plan*



## Main Feature

### Easy to operate and maintain

SGX20000 supports both web-based and text-based configuration set up. Users can remotely upgrade the software, Capture Voice streaming/SIP message, change the configuration parameters, download log files.

### High Interoperability

SGX20000 has passed the interoperability tests with many softswitch and gateway suppliers worldwide, such as Huawei, ZTE, Cisco, Alcatel, Lucent, Panasonic, NEC, Harris, Nortel, and open source hosted IPPBX asterisk.

### FAX over IP (T.38/Pass-through)

SGX20000 support FAX T.38 as default. FAX T.38 is the preferred method for FAX over TCP/IP because it is more reliable and works well in most network conditions. Anyway, If the service provider does not support T.38, FAX pass-through mode may be applied.

### Investment Protection

One main challenge of purchasing new IP-based voice equipment's is how to protect your investment. SGX20000 not only offers the best cost effectiveness but also supports the latest VoIP technologies and of the standards. Users can take advantage newest VoIP technologies by upgrading SGX20000 software.

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## Specification

TECHNICAL SPECIFICATIONS	
<b>System Capacity</b> <ul style="list-style-type: none"> <li>• 20E1 up to 63E1 ports</li> </ul>	<b>Physical Interface</b>
<b>VoIP Specifications</b> <ul style="list-style-type: none"> <li>• G.711A/U law, G.726/ G.723.1, G.729A/B, iLBC/AMR</li> <li>• Silence Suppression &amp; Detection</li> <li>• Comfort Noise Generation(CNG)</li> <li>• Voice Activity Detection(VAD)</li> <li>• Echo Cancellation(G.168)</li> <li>• Adaptive (Dynamic) Jitter Buffer</li> <li>• T.38/Pass-through/Modem FAX mode</li> <li>• Call Progress Tone Generation</li> <li>• Programmable Gain Control</li> </ul>	<ul style="list-style-type: none"> <li>• ISDN Interface: 4E1/module, G.703, 120Ω RJ-48</li> <li>• Ethernet Interface: <ul style="list-style-type: none"> <li>GE1: 10/100/1000 BaseT Adaptive Ethernet</li> <li>GE0: 10/100/1000 BaseT Adaptive Ethernet</li> </ul> </li> <li>• Management Interface: 1 Console port, 11520bps</li> </ul>
<b>SIP Protocol</b> <ul style="list-style-type: none"> <li>• SIP V2.0 RFC( 3261,3262,3263,3264,3265, 3515,2976,3311)</li> <li>• SDP –RFC 2327</li> <li>• RTP/RTCP (RFC 2198,1889)</li> <li>• SIP-T (RFC3372,3204,3398), SIP/TCP</li> <li>• SIP Domain register</li> <li>• IP Group Management</li> <li>• Trunk priority management</li> <li>• Peer/Access work mode</li> <li>• IP address/Domain authentication</li> <li>• SIP User/Password register to remote</li> </ul>	<b>Network</b> <ul style="list-style-type: none"> <li>• IP, TCP, UDP, TFTP, FTP, TCP, ARP, RARP, Ping, NTP, SNMP, Http, DNS, Trancert</li> <li>• QoS control: ToS, DS</li> </ul>
	<b>TDM Signal</b> <ul style="list-style-type: none"> <li>• SS7/No.7 (Optional) <ul style="list-style-type: none"> <li>Signal 7/SS7</li> <li>ITU-T, ANSI, ITU-CHINA, MTP1/MTP2/MTP3, TUP/ISUP</li> </ul> </li> <li>• PRI /PRA <ul style="list-style-type: none"> <li>23B+D(T1), 30B+D(E1), NT or TE</li> <li>ITU-T Q.921, ITU-T Q.931, Q.Sig</li> </ul> </li> <li>• Line Codes: <ul style="list-style-type: none"> <li>E1: NRZ, CMI, AMI, HDB3</li> <li>T1: NRZ, CMI, AMI, B8ZS</li> </ul> </li> <li>• E1 Frame Type : DF, CRC-4, CRC_ITU</li> <li>• T1 Frame Type : 4-Frame Multi-frame (F4, FT), 2-Frame Multi-frame (F12, D3/4), Extended Super-frame (F24, ESF), Remote Switch Mode (F72, SLC96)</li> <li>• Clock : Local/Remote Clock Source</li> </ul>
	<b>Features</b> <ul style="list-style-type: none"> <li>• DTMF: RFC2833, SIP INFO, INBAND</li> <li>• Back tone/busy tone control</li> <li>• Digit Map</li> <li>• Dial rule configuration, max 2000 rules</li> <li>• Overlap receiving</li> <li>• Dial time control</li> <li>• Time slot group management</li> <li>• E1/T1 port group management</li> </ul>

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TECHNICAL SPECIFICATIONS	
<p><b>Feature (Continues)</b></p> <ul style="list-style-type: none"> <li>• Many routing way PSTN-PSTN, PSTN-IP, IP-IP, IP-PSTN</li> <li>• Intelligent routing</li> <li>• Routing time control</li> <li>• 99 routing</li> <li>• Caller/callee manipulation</li> <li>• 128 number manipulation</li> </ul>	<p><b>Compatibility</b></p> <ul style="list-style-type: none"> <li>•Fully compatible with mainstream vendors, such as HUAWEI softX3000, elastix, trixbox, voipswitch, asterisk etc.</li> <li>•Compatible with other standard NGN Soft Switch and SIP server</li> </ul>
<p><b>Management</b></p> <ul style="list-style-type: none"> <li>• Web based configuration</li> <li>• HTTP/Telnet configuration</li> <li>• Data backup/restore</li> <li>• Support English and China language</li> <li>• Firmware upgrade by TFTP</li> <li>• Web &amp; telnet login password modify</li> <li>• SNMP V2 management</li> <li>• Syslog: Debug, Info, Error, Warning , Notice</li> <li>• NTP Configuration</li> </ul>	<p><b>Environment</b></p> <ul style="list-style-type: none"> <li>•Power: input:100-240V,50-60Hz</li> <li>•Power consumption (w): 20E1/45 w , 63E1/120 w</li> <li>•Temperature( operator): 0 °C~ 45 °C(storage): -20 °C ~80 °C</li> <li>•Humidity: 10%-90% no condensation</li> </ul>
	<p><b>Dimension</b></p> <ul style="list-style-type: none"> <li>• 20E1 : W/D/H: 436*300*44.5mm,Weight: 4.0kg</li> <li>• 63E1 : W/D/H: 436*300*140mm,Weight: 9.0kg</li> </ul>

### For more information

Please visit: [www.suncti.co.th](http://www.suncti.co.th) or call 66-2-9610991-94 or email : [kit@suncti.co.th](mailto:kit@suncti.co.th)

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