



## Huawei New Generation eSBC SE1000

### Building Secure & Interconnected VoIP World



Huawei New Generation eSBC SE1000

Nowadays, using IP-based audio, video, conference, and converged communication is becoming a business necessity for enterprises, and therefore the SBC is required to manage VoIP services. Huawei SE1000 (Enterprise SBC), designed for small-/medium-sized enterprises (with 25 to 5000 concurrent sessions), delivers unrivalled communication services and helps enterprises address issues that are encountered during network evolution, such as the shift to mobile work, interconnection, and converged network.

1. **Simplified management:** Network maintenance has been complicated by increased enterprise network scales and diversified services. Huawei SE1000 helps enterprises reduce operating expense (OPEX) and focus on core businesses by means of ME- and network-level optimization. Huawei SE1000 is capable of black box management and provides intelligent configuration packages. In addition, visual monitoring simplifies operation and maintenance activities, and high-performance integration simplifies network architecture.
  - (1) **Automatic adaptation and 5-minute fast deployment:** Huawei SE1000 supports one-click configurations for enterprise-specific functions, including basic functions (such as NAT traversal) and advanced functions (such as intelligent attack defense) are preset, thereby reducing network design investment.
  - (2) **Visual traffic management and control on demand:** Web-

based OM contributes to IP-/user-/office direction-based management. Visual tracing helps you know the status of each call and node, and therefore the fault location time is reduced by 16 times.

- (3) **Device integration to simplify network architecture:** The WebRTC is embedded in Huawei SE1000 for Web-based multimedia access. Huawei SE1000 offers carrier-class RCS/VoLTE services and therefore achieves seamless media exchanges between enterprises' and carriers' networks.
2. **Security protection:** Remote office services face security risks as the data of such services is transmitted through the public network. Data theft risks exist everywhere. DDoS/DoS attacks exponentially increase. Abnormal behavior, such as ultra-short calls, are happening more than ever before. Huawei SE1000 provides professional network-wide security protection for enterprises.
  - (1) **Unique security analysis center and professional firewall for 100% security:** Characteristic match and system-level security policy achieve associated attack defense, which greatly reduces the impact of attack defense on system performance.

*The SE1000 is the new generation eSBC designed for enterprise VoIP services. The SE1000 uses huawei's RH1288 server platform and inherits Huawei's rich experience in the core network, IP, and security fields. Till now, Huawei SE series are deployed in more than 200 operators and provide service for 200 million users.*

- (2) Huawei patented flow control to effortlessly defend against signaling storms: Huawei SE1000 performs flow control based on services, users, and call status once the traffic bursts due to significant events or network failures, ensuring zero service loss in the case of 3 times the normal load.
- (3) Unique geographical redundancy: Huawei SE1000 provides ARP-based dual-system hot backup for local sites and BFD-based remote dual-system hot backup even if the sites are more than 10 kilometers away from each other.

3. **Converged interoperability:** Protocol, codec, and traffic model inconsistency issues may arise during network interconnection between headquarters and branches, between enterprises and carriers, and even between different types of networks. Huawei SE1000 is compatible with all mainstream signaling and media protocols, thereby helps enterprises achieve converged communication by masking the differences between devices from different vendors, different solutions, and different networks.

- (1) **Easy network access services for different types of terminals:** Huawei SE1000 can be used in Huawei VoBB/RCS/UC solutions that have been widely deployed, and therefore it enables soft and hard terminals, PBXs, and IADs to seamlessly access networks for fast commercial use.
- (2) **Comprehensive protocol adaptation and codec auto-adaptation:** Huawei SE1000 automatically identifies network protocols for IPv4/IPv6 adaptation as well as adaptation between transport protocols (TCP/UDP/SCTP) and signaling protocols (SIP/SIP-I/SIP-T/H.323) and achieves media transcoding.

- (3) **Flexible message processing for simplified interworking among devices of different vendors:** Huawei SE1000 provides programmable SIP message manipulation methods (regular expression) so that SIP message can be flexibly modified and adapted to meet interoperability requirements of different networks.

*Huawei SE1000 Series*



*SE1000-E300*

*300 session, Data encryption*



*SE1000-E600*

*5000 session, Data encryption, audio transcoding, Dual-*



*SE1000-E800*

*Video Gateway, Video transcoding, Dual-system hot backup,*

*2015Q3*



*SE1000-SW*

*100 session, software SBC, SBC/UC in one box, 2015Q3*



Product	SE1000-E300	SE1000-E600
<b>Specifications (applicable when in dual-system redundancy mode)</b>		
Capacity	3,000 subscribers 300 media sessions	50,000 subscribers 5000 media sessions
Calls per second	400 CPS	
Throughput	4 Gbit/s	
SIP over TLS capacity	Up to 3,000 TLS subscribers	Up to 50,000 TLS subscribers
SRTP sessions	Up to 300 SRTP sessions	Up to 2,500 SRTP sessions
Protocol	IPv4/IPv6, UDP/TCP, RTP/RTCP/MSRP, TLS/SRTP, SIP/H.323, SNMP/NTP	
Codec capability	G.711/G.722/G.723/G.729/AMR-NB/AMR-WB, T.38/iLBC/DTMF/2833, EVS/H.264/H.265	
<b>System reliability specifications</b>		
System availability	≥ 99.999635%	
Downtime	< 3 minutes/year	
<b>Dimensions, power consumption, and environmental specifications</b>		
Height	1U	
Dimensions (H x W x D)	43 mm×436 mm×708 mm	
Weight	Typical configuration: 20 kg	
Power consumption	Typical configuration: 104 W	
Environmental specifications	ETSI EN 300 386 V1.6.1:2012 , ETSI ES 201 468 V1.3.1:2005	
Altitude	≤3000m, 1 ° C lower is calculated for each 300m when above 900m	
Temperature	Storage temperature: -40°C - +70°C ( -40°F - 158°F ) Operating temperature: 5°C - 45°C ( 41°F - 113°F )	
Relative humidity	9% RH to 90% RH	
Noise	≤46.7dBA ( 23oC ± 2oC )	
<b>Safety specifications</b>		
Safety compliance	IEC 60950-1:2005(2nd Edition)+A1:2009 and/or EN 60950-1:2006+A11:2009+A1:2010+A12:2011	
EMC	EN 55022:2010 CISPR 22:2008 EN 55024:2010 CISPR 24:2010 ETSI EN 300 386 V1.6.1:2012 ETSI ES 201 468 V1.3.1:2005 VCCI V-3:2012 AS/NZS CISPR 22:2009 IEC 61000-3-2:2005+A1:2008+A2:2009/EN 61000-3-2:2006+A1:2009+A2:2009 IEC 61000-3-3:2008/EN 61000-3-3:2008 IEC 61000-6-2:2005/EN 61000-6-2:2005 IEC 61000-6-4:2006+A1:2010/EN 61000-6-4:2007+A1:2011	
Certifications	Europe: CE, RoHS, WEEE North America: FCC, Class A, MET, IC Other regions: C-TICK, VCCI, SASO, SONCAP, CCC	

Copyright © Huawei Technologies Co., Ltd. 2015. All rights reserved.

THIS DOCUMENT IS FOR INFORMATION PURPOSE ONLY, AND DOES NOT CONSTITUTE ANY KIND OF WARRANTIES.

**HUAWEI TECHNOLOGIES CO., LTD.**

Huawei Industrial Base  
Bantian Longgang  
Shenzhen 518129, P.R. China  
Tel: +86-755-28780808  
Version No.: M3-033087-20150626-C-3.0

[www.huawei.com](http://www.huawei.com)





**HUAWEI**

Building Secure & Interconnected VoIP world