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## G/// gateway

Aculab's G/// gateway is a cost-effective signalling and media gateway for any telco or service provider function where voice network interworking is needed.

It can be readily used for many VoIP gateway purposes, enabling the delivery of IP-based, revenue generating, added value services to end users in legacy SS7, CAS and PRI networks.



### Solving your interoperability problems

The G/// gateway is an adaptable, integrated 2U appliance that combines signalling and media interworking, protocol conversion, call routing, and transcoding for supported protocols that include CAS, CAMA, Q.931-based ISDN PRI, SS7 and SIP. The G/// gateway provides users with enormous flexibility in configuration and usage, including many call routing features. In short, the G/// gateway is a powerful and adaptable problem solver.

### VoIP generation applications

The G/// gateway provides a dependable, deployment proven solution for interconnecting TDM networks and interworking to SIP networks and equipment. It can be easily configured for a variety of applications e.g., it can be deployed between public or private managed networks and hosted, IP-based service platforms; contact centre switches; IP-based emergency services functional elements; IP call managers; and PBXs with disparate TDM or IP interfaces.

### Product features

- Signalling and media gateway – SS7-to-SIP interworking
- Integrated call manager offering: parameter-based call routing; numbering plans; number translation; and alternative or fallback routing
- Protocol conversion – SIP, SS7 and most ISDN and CAS networks – with simultaneous use of multiple protocols
- Dual chassis mode, dual-redundant SS7 signalling; 'A' or 'F' links
- Web browser UI offers intuitive access to all administrative functions
- Web-services APIs enable remote management of e.g., backups and CDR search
- SNMPv3, remote management, and 'lights out' control
- Hot swap PSUs and drives; RAID Level 1
- Multi-node clustering enables large system scaling, with cross-cluster administration from a single node log-in

### Product benefits

- Solves your call routing and interworking problems
- A cost-effective alternative to expensive, bespoke solutions for service interconnection
- Extends the capability of existing TDM or IP infrastructure, helping you deliver added value, revenue generating services
- Optimised for SS7-to-SIP interworking in next generation emergency services (EENA/NENA i3) architectures, including TTY-to-RTT transcoding
- A resilient and reliable, tried and tested solution that can be deployed worldwide
- Standards-based voice network interworking that gives you peace of mind

## Technical summary

Configuration	G/// gateway – 2U chassis
<b>System capacity</b>	
IP channels	240(192); 480 (384); 720 (576); 960 (768) <sup>1</sup>
E1/T1 trunk options	8, 16, 24 or 32 <sup>1</sup>
<b>IP interfaces</b>	
LAN protocol and connections – SIP, VoIP traffic, and OAM&P	10/100/1000 Mb BASE-T Ethernet; NIC teaming; 4 x RJ45
Protocols supported	SIP 2.0; TLS <sup>2&amp;3</sup> ; RTP; SRTP <sup>2&amp;3</sup> ; RTT; TCP; UDP – contact Aculab for further details
Voice codecs	G.711; G.726; G.729A/B – negotiated on a per call basis
<b>TDM interfaces</b>	
Network line interfaces	E1/T1; software selectable; 75R, 100R, or 120R terminations
Network connection	4 x RJ45 per module; adapter cables supplied (8 E1/T1 and above); BNC via adaptor UK, ITU-T, China, and ANSI ISUP <sup>4</sup> ; MTP; SIGTRAN M3UA <sup>4</sup>
SS7 support	Fully or quasi-associated ('A' or 'F' links)
	Up to 128 links per gateway node; load sharing CIC/timeslot blocking facility
Legacy ISDN and CAS protocols supported	A wide range of protocols including MFC R2; T1RBS; TI CAMA; NI-2; DMS 100; TR41459, Euro ISDN, BT DASS2, DPNSS and QSIG – contact Aculab for further details
<b>Management</b>	
User administration	Unified, Web browser-based UI; single node log-in for any/all nodes in a cluster
Configuration 'roles'	Stored configurations (incl. IP addressing) can be applied to any node <sup>5</sup>
Remote management	Web-services APIs; SNMPv3; remote KVM; 'lights out' control
IP addresses	3 (total) needed
Call data records (CDRs)	Searchable, database driven CDRs
SYSLOG	Consolidated, cross-cluster repository facilitates reporting and debugging
<b>Physical and environmental</b>	
Chassis	Open industry standard, 2U 19" rack mountable, PCI Express (PCIe); NEBS compliant
Chassis dimensions - width, height, depth	444mm x 87.3mm x 684mm <sup>6</sup>
Weight	24 kg <sup>7</sup>
Peripherals available	Keyboard and mouse
Power supply	230/115V AC (50/60Hz); -48 V DC; dual-redundant hot swappable
Hot-swap RAID Level 1	Standard
Power consumption / heat dissipation	300W / 1024BTU/hr <sup>7</sup>
Airflow path	Front (intake) to rear (exhaust)
Operating environment	Operating temperature (ambient) <sup>8</sup> : 10° C to 35° C Humidity: 10-80% RH, non-condensing, over temperature range 10° C to 35° C
EMC standard	EN55032/55024; FCC CFR 47: Part 15: B
Safety standard	EN60950; UL60950
RoHS	Complies with RoHS Directive 2011/65/EU

### Notes:

1. Restrictions apply regarding specific configurations and available modules; contact your Account Manager for details.
2. Export restrictions apply to systems with 'Strong Encryption' – contact your Account Manager for further details.
3. TLS/SRTP available for SIP calls only.
4. For availability and for other national and international variants, please contact your Account Manager.
5. G/// gateway backups can be ported to configure an equivalent G/// gateway – contact Aculab Support for advice
6. For overall dimensions, allow additional depth for front panel handles and cables at rear.
7. Figures are for the maximum system configuration.
8. Figures given are for continuous operation.

For more information, please contact your Account Manager or view our website:  
[www.aculab.com](http://www.aculab.com)

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