

iGATE

Mobile gateway for GSM, 3G UMTS, and CDMA

The iGATE connects carrier networks to mobile networks and enhances the functionality of a corporate PBX



- Converts fixed-to-mobile calls into cost-saving mobile-to-mobile calls
- Integrated Mobile Number Portability ends costly cross-network calls
- Integrated VoIP gateway
- PSTN support (PRI and BRI, SS7)
- Powerful Least Cost Routing
- Seamless integration into existing telecom infrastructures
- Fixed network backup via mobile
- Fully vGATE SIM Server compatible

Field-proven mobile gateways

Invest in outstanding value and benefit from cost saving mobile-to-mobile calls. The premium suite of features ensures complete compatibility with your current carrier equipment and total interoperability with all third-party VoIP equipment.

Save time and effort during installation as a result of built-in, designed compatibility. The TELES iGATE and vGATE SIM Server are the only team of products designed from scratch to interoperate. You avoid complex and unstable third-party to third-party gateway to SIM server configurations.

Flexible and versatile connectivity

Benefit from outstanding versatility. The iGATE includes a VoIP gateway with up to 32 VoIP channels, 32 mobile channels, 2 E1/T1 interfaces, and a LAN connection. Independent of the network type, the iGATE can connect to different local or remote VoIP and mobile networks – including GSM, 3G UMTS and CDMA – and can switch between each single incoming to any outgoing channel.

Least Cost Routing

Save money on every phone call. iGATE's LCR (Least Cost Routing) features automatically route calls from your PBX – via the least expensive route – to each destination, whether that is over a standard fixed-line network, a mobile network, or over the Internet. Plus, LCR combines with other superior call-routing capabilities that are based on, for example, called party, CLIP/CLIR, time-of-day, time quota, service quality, and SIM card profile.

Guaranteed voice quality

Ensure superior voice quality. In addition to all the standard VoIP features – like echo cancellation, silence suppression, and comfort noise – iGATE's premium feature set includes the best available DSPs, traffic shaping, and multi-level fallback. A variety of voice speech compression codecs reduce bandwidth need and RTP multiplexing technology enables even further bandwidth reduction.

CAPABILITIES

Scalability	4–32 mobile channels 1/6 SIM per channel 2 PRI, 4 BRI 8/16/32 VoIP channels
VoIP codecs	G.711, G.723, G.726, G.728, G.729, GSM
Fax support	T.38, fallback to G.711
Echo cancellation	G.168 – 2002, 128 ms tail length
DTMF	RFC 2833, SIP/H.323 info, inband
VoIP quality	Configurable ToS, Diffserv, VLAN Silence suppression, VAD, CNG, G.729B QoS alternative routing based on ASR, fraction lost, jitter, and roundtrip delay. Traffic shaping Dynamic PSTN fallback (IntraStar patent)
Call routing	Time-dependent routing Multilevel alternative routing 5000 routing entries ENUM support Database managed routing Support for multiple gatekeepers, H.225 (v4) Support for multiple registrars Overlap/en-bloc conversion RFC 3578 Digit manipulation Black/white list
Advanced	Integrated SIP registrar and location server AOC generation (AOC-D, AOC-E) Integrated callback/two-stage-dialing server Integrated DSL router (PPPoE) Integrated IP router via GPRS, UMTS/HSDPA or CDMA 2000 RTP multiplex bandwidth reduction STUN support Symmetric RTP (COMEDIA) Radius support
GSM specific	Full vGATE SIM Server support Alert/busy tone detection Announcement recognition E-mail to SMS conversion QoS routing: automatic blocking of GSM ports based on ASR, announcements or network errors

SYSTEM MANAGEMENT

Remote access via IP or ISDN data call with NMS or GATE Manager
HTML configuration interface
SNMP (alarm management)
Call detail records (CDRs)

PROTOCOLS

ISDN	PRI: DSS1 (Q.931, national variants), Q.SIG-BC, NI2, CAS/R2*, SS7 (Q.767) E1/T1, TE/NT, CRC4/Double Frame BRI: DSS1 (Q.931, national variants), Q.SIG-BC, TE/NT, PP/PMP
VoIP	SIP (RFC 3261), H.323 (v4) MGCP*, M2UA*, IUA*
Mobile	GSM: Quadband (850/900/1800/1900 MHz) CDMA: Dualband (800/1900 MHz) 3G UMTS: Multipleband (GSM 850/900/1800/1900 MHz), UMTS (2100 MHz)

SS7 SPECIFICATIONS

MTP level 2	Q.703, test specification Q.781 Signaling timeslot configurable
MTP level 3	Q.704, test specification Q.782 Implementation as signaling endpoint (SEP) One point code Passive support of maintenance functions
ISUP	Q.761 – Q.764, test specification Q.784.1 ISUP V2, Q.767

CONNECTION SPECIFICATIONS

ISDN	2 × E1/T1, 120 ohms balanced, RJ-45 4 × BRI, RJ-45
Ethernet	2 × Ethernet 10/100 Base-T RJ-45
Antenna	SMA (1 antenna per 16 channels)

PHYSICAL PARAMETERS

Size (W × H × D)	2U: 483 mm × 88 mm × 450 mm 4U: 483 mm × 177 mm × 450 mm
Material	2U: Aluminium 4U: Sheet steel
Mounting	19" Rack
Power supply	2U: 100–240 VAC, 200 W 4U: 100–240 VAC, 400 W

ENVIRONMENTAL CONDITIONS

Temperature	+5 °C to +40 °C
Humidity	5 % to 80 % (non-condensing)

CERTIFICATES

EMC, Safety, CE, FCC



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TELES AG
Informationstechnologien

TELES AG | HEADQUARTERS
Ernst-Reuter-Platz 8
10587 Berlin
GERMANY
Phone +49 30 399 28 - 066
Fax +49 30 399 28 - 051
E-mail sales@teles.com