

# iGATE®

## Mobile gateway for 2G, 3G, and CDMA



- Converts fixed-to-mobile calls into cost-saving mobile-to-mobile calls
- Integrated VoIP gateway
- PSTN support
- Powerful Least Cost Routing
- Mobile Internet broad band access through HSDPA
- Fixed network backup via mobile
- Email to SMS support
- 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 telecommunication 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 2G (GSM/GPRS/EDGE), 3G (UMTS/HSDPA) 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

<b>Scalability</b>	4–32 mobile channels 1/6 SIM per channel 2 PRI 8/16/32 VoIP channels
<b>VoIP codecs</b>	G.711, G.723, G.726, G.728, G.729, GSM
<b>Fax support</b>	T.38, fallback to G.711
<b>Echo cancellation</b>	G.168 – 2002, 128 ms tail length
<b>DTMF</b>	RFC 2833, SIP/H.323 info, inband
<b>VoIP quality</b>	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)
<b>Call routing</b>	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
<b>Data access</b>	Integrated IP router via GPRS/EDGE/UMTS/HSDPA Up to 14.4 Mbps in downlink Up to 768 kbps in uplink Integrated DSL router (PPPoE) DHCP server and client Firewall support VPN support
<b>Advanced</b>	Integrated SIP registrar and location server AOC generation (AOC-D, AOC-E) Integrated callback/two-stage-dialing server RTP multiplex bandwidth reduction STUN support Symmetric RTP (COMEDIA) Radius support
<b>2G/3G specific</b>	Full vGATE SIM Server support Alert/busy tone detection Announcement recognition E-mail to SMS conversion QoS routing: automatic blocking of GSM/UMTS 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

<b>ISDN</b>	PRI: DSS1 (Q.931, national variants), Q.SIG-BC, NI2, CAS/R2 E1/T1, TE/NT, CRC4/Double Frame
<b>VoIP</b>	SIP (RFC 3261), H.323 (v4)
<b>Mobile</b>	2G GSM: 850/900/1800/1900 MHz 3G: UMTS/HSDPA Multipleband 2G 850/900/1800/1900 MHz 3G 850, 1900, 2100 MHz CDMA: Dualband 800/1900 MHz

## CONNECTION SPECIFICATIONS

<b>ISDN</b>	2 × E1/T1, 120 ohm balanced, RJ-45
<b>Ethernet</b>	2 × Ethernet 10/100 Base-T RJ-45
<b>Antenna</b>	SMA (1 antenna per 16 channels)

## PHYSICAL PARAMETERS

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

## ENVIRONMENTAL CONDITIONS

<b>Temperature</b>	+5°C to +40°C
<b>Humidity</b>	5 % to 80 % (non-condensing)

## CERTIFICATES

EMC, Safety, CE
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