ECOTEL® compact



GSM gateways with up to 8 GSM channels (ISDN-GSM, analog-GSM, VoIP-ISDN-GSM)

Cost-effective connectivity between fixed networks, VoIP and mobile networks (GSM)

Companies are spending a lot of money on telephone charges. This is why VIERLING developed the ECOTEL®GSM gateways.

ECOTEL® ISDN, **ECOTEL® GSM** and **ECOTEL® VoIP** allow reliable, cost-effective connectivity between GSM, VoIP, ISDN and the analog landline network.

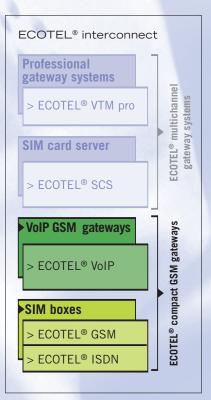
Using these gateways, companies can reduce their phone expenses by up to 70 percent using least cost routing (LCR). This makes for fast amortization.

ECOTEL® VoIP - The VoIP GSM gateway for connectivity between IP, ISDN and GSM

for connectivity between IP, ISDN and GSM ECOTEL® ISDN - The GSM gateway for digital

communications (ISDN)

ECOTEL® GSM - The GSM gateway for analog connections



VIERLING



ISDN / analog

For small and mediumsized companies

For companies with a large volume of mobile radio traffic

Connection of mobile sites (office containers, ships, RVs, emergency vehicles, etc.)

Last mile concept / Wireless local loop (WLL)

Business continuity Internet via GSM/GPRS



Voice, Data, Fax, SMS ...



The ECOTEL® ISDN gateway uses the installed SIM cards to set up cost-effective connections between ISDN and GSM networks (GSM 850/900/1800/1900/R). The use of least cost routing helps companies to reduce their phone costs by up to 70 percent.

You can operate ECOTEL® ISDN in a mobile or stationary environment and connect it to existing PBXs. The gateway can handle telephone calls as well as a variety of office applications including PC fax, Internet and email. This offers a solid basis for connection of complete mobile offices as well as wireless local loop and business continuity applications.

ECOTEL® GSM

ECOTEL[®] GSM allows reliable, cost-effective connections between the analog landline network and GSM networks (GSM 850/900/1800/1900/R). Least cost routing again helps to reduce telephone costs.

You can operate the gateway in a mobile or stationary environment. Possible applications range from situations where there is no fixed-network connection all the way through connection of complete PBXs. ECOTEL® GSM can be connected simultaneously to the outside lines and extensions of the PBX. In each of these cases, it will enable cost-effective interconnection of analog phones and fax machines with GSM mobile radio networks.

The connection on the extension side allows external callers to select the desired extension. If the caller does not dial an extension, he or she will be automatically connected to a default extension.



ECOTEL® ISDN2-1x with up to 4 GSM channels



ECOTEL® ISDN2-2x with up to 8 GSM channels and intelligent local SIM management

Possible connections:

- Connection to an internal extension of a PBX (TE)
- Connection to an outside line of a PBX (NT)
- Direct connection of several telephones (NT, additional power supply required for ECOTEL® ISDN)
- Use as a least cost router (TE/NT) in the outside line of a PBX

ECOTEL® GSM only:

• Direct connection of an analog fax machine, inclusive fax switch



ECOTEL® GSM3-3x



ECOTEL® GSM3-1x

... endless possibilities with or without fixed network

ECOTEL® VoIP

ECOTEL[®] VoIP connects IP, ISDN and GSM networks. Potential applications include classic least cost routing with connection to an existing IP or ISDN PBX all the way through implementation of mobile offices and distributed solutions. It is possible to configure multiple ECOTEL[®] VoIP via LAN by using a centralized software solution.

The number of GSM channels is scalable up to a total of eight. The GSM modules are compatible with all types of GSM networks (GSM 850/900/1800/1900/R). ECOTEL® VoIP is capable of routing up to eight concurrent IP calls to GSM. The gateway can be operated in an IP network and on the ISDN basic rate interface (BRI). It uses the session initiation protocol (SIP) and can simultaneously manage up to eight VoIP channels in parallel. All commonly available codecs are supported.

VolPGerman

Two BRI interfaces are provided for ISDN connections. These interfaces can be configured in NT or in TE mode.



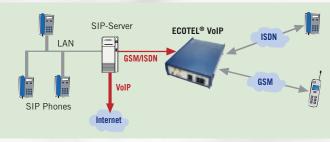
Interconnection between VoIP, ISDN and GSM

8 channels (VoIP and GSM each), 2 channels ISDN

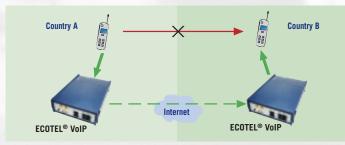
Distributed applications

SIP-based

With intelligent SIM management and SIM Card Server integration



Corporate user (IP only)



International connections

ECOTEL® VoIP

Possible connections:

- Connection to an internal extension of a PBX (TE)
- Connection to an outside line of a PBX (NT)
- Direct connection of several telephones (NT, additional power supply required)
- Use as a least cost router (TE/NT) in the outside line of a PBX
- Use as a SIP client
- Use as a SIP server
- Use as a SIP proxy



Always the right solution: **ECOTEL®** compact

TECHNICAL SPECIFICATIONS

	ECOTEL®GSM3-1x	ECOTEL®GSM3-3x	ECOTEL® ISDN	ECOTEL [®] VoIP
GSM	900/1800/1900/R	850/900/1800/1900/R	850/900/1800/1900/R	850/900/1800/1900/R
Interfaces	1 FXS/1 FXO/1 Fax	1 FXS/1 FXO/1 Fax	2 or 4 x BRI	2 x BRI
GSM channels	1	1	1**, 2**, 4, 8*	2-8
Protocols: a/b / DSS1 / VoIP	●/_/-	●/-/-	_/●/-	_/●/●
Least Cost Routing (LCR)	•	•	•	•
Generation of charging information	•	•	•	•
IVR	•	•	•	•
Data and fax transmission: analog fax/PC-fax/PC-data	●/●/●	●***/●/●	_/●/●	_/●/●
Configuration via Windows software	•	•	•	•
Management access / remote access for remote administration, configuration and download	V.24/GSM	USB	(V.24**)/Ethernet****/ GSM****	USB/Ethernet/GSM
Short Message Service (SMS) via PC (optional Software)	•	•	•	•
Callback functions (CLIP, SMS,)		•	•****	•
Adaptive Rerouting		•	•****	•
Monitoring time quotas of mobile network channels	•	٠	٠	•
Monitoring and rerouting in case of mobile network failure		•	•	•
Time dependent routing		•	•****	•
SIM switching			•*	•
SIM Card Server connection			•*	•
MNP (NQuire Mobile Number Portability)			•	•
Call Detail Records (CDR)		٠	•	•
Echo cancellation	•	•		G.168-2000
VoIP protocol				SIP
Codecs				G.711 G.726 G.729/Annex A G.723.1

*ECOTEL® ISDN2-2x only **ECOTEL® ISDN2-1x only *** available 12/2007 **** not available with ECOTEL® ISDN2-120 lite

Technical changes reserved 09/07-V-0



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