



Echo Cancellation for VoIP-PSTN Gateways

Ditech Platform

Ditech's HEC solution for VoIP-PSTN gateways is available on the following platforms:



BVP Flex f100
OC-3/DS-3/STS-1/STS-1



**Quad 2 E1 or
Quad 2 T1
in Carrier Shelf**



**Quad 2 E1 or Quad 2 T1
in Enterprise Shelf**

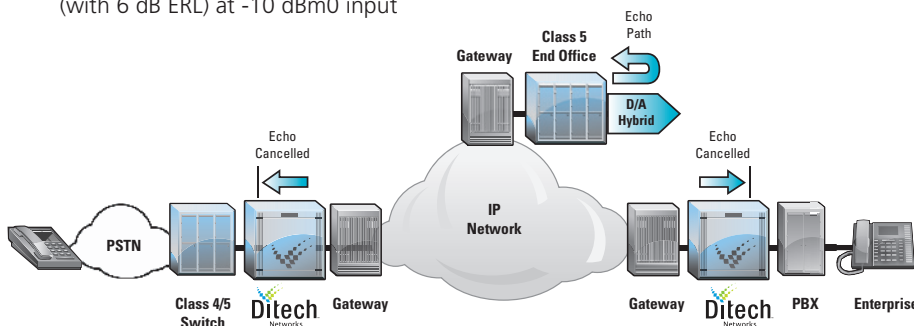
Ditech Networks' Hybrid Echo Cancellation (HEC) solutions completely remove the annoying hybrid echo frequently encountered on VoIP calls. Ditech's world-class solutions also provide a selection of voice quality features, such as automatic level control, background noise reduction, and acoustic echo control.

In IP gateway applications, hybrid echo is present due to the digital-to-analog conversion at the 4-wire to 2-wire hybrid in the PSTN section of the network. Since latency in packet networks is variable and long, echo cancellation is very noticeable and needed on all calls. Gateway-integrated hybrid echo cancellation solutions can consume switch ports, provide poor performance, or have inadequate tail delay.

The Solution

Ditech offers both narrowband and broadband platforms that include the following features:

- Industry's longest dynamic echo cancellation – up to 192 ms tail – ensuring consistently clear, echo-free calls, even in the face of network migration of TDM to VoIP
- Fast, stable convergence of less than 50 ms, with 30 dB or better ERL+ERLE
- Industry-leading performance cancels echo with ERL up to 0 dB; >35 dB ERLE (with 6 dB ERL) at -10 dBm0 input
- G.164, G.165, and G.168-2002 compliance
- Low per-channel power consumption reduces cooling and power costs
- High-density Carrier shelves save valuable floor space
- Easy-to-configure 1-to-4 port Enterprise shelf option with AC or DC power
- Remote access and provisioning with Ditech's easy-to-use element management systems



Ditech's HEC Solution for VoIP-PSTN Gateways

For HEC with an expanded suite of sophisticated voice enhancement features, Ditech recommends its VQA™ solutions.

Contact your local sales representative or Ditech's headquarters at the phone number and address below for more information.

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