



- Customisable for challenging network deployment scenarios including VoIP Gateways
- Near and Far End Echo Cancellation
- Exceptional Double Talk Performance
- Dedicated per channel Processing
- Supports advanced CODEC Technologies including EVRC
- Spectrally accurate comfort noise generation
- Standard and User configurable data and fax operation

“Advanced Voice Quality Enhancement with Far and Near End echo cancellation and Adaptive Noise Reduction”

VQUEST 300

Advanced Voice Quality Enhancement Solution for your Network

VQUEST 300 is a Voice Quality Enhancement System intended for Network Operators with challenging Voice Quality problems to resolve in their Network Configurations.

The VQUEST 300 solution is tailored to deliver superior voice quality in even the most challenging carrier network configurations including Wireless Local Loop, Circuit Switched PSTN, GSM/CDMA and Voice Over Packet.

The modularity of VQUEST 300 allows the G.168 (2002) compliant voice quality enhancement to support up to 320 bi-directional voice channels.

Configurations include 2, 4, 6, 8 and 10 full bi-directional echo cancellation and voice enhancement on E1 or T1 interfaces.

VQUEST 300 can be remotely managed and monitored using the VQUEST-EM element manager.

VQUEST 300 is scalable and customisable for your network context, reducing your risk in reaching your voice quality objectives.

Features

Far and Near End echo cancellation

Adaptive Noise Reduction

Acoustic Echo Control

Field Configurable Algorithm

Rack Alarm Interface

Benefits

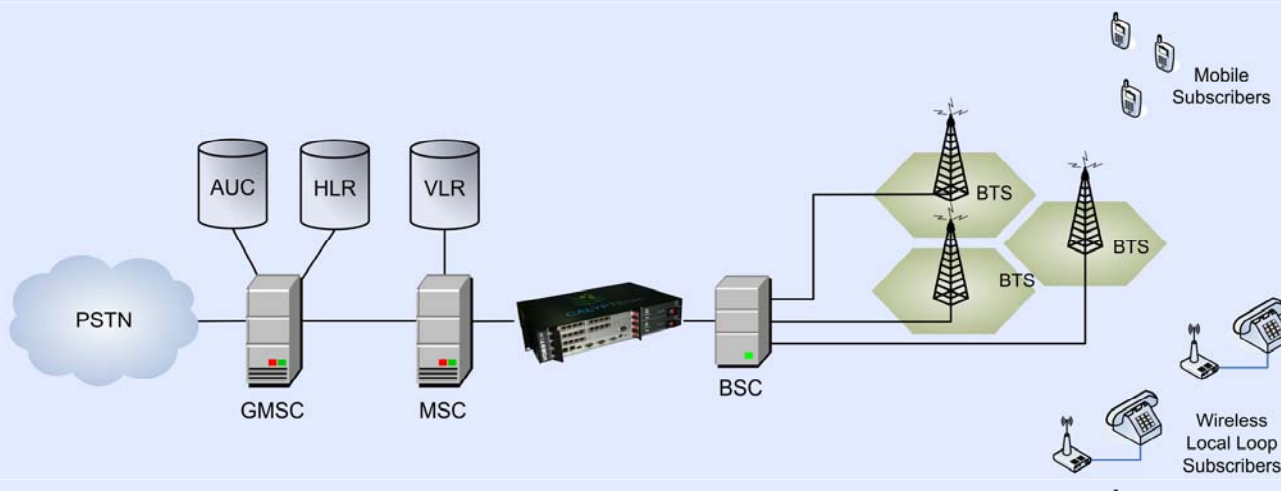
Bi-directional echo cancellation, removes the reliance on poor near end handset echo cancellation performance

Background noise suppression leads to more intelligible speech, and better performance from ASR and AVR systems

Echo scenarios for real life situations (for example, hands free) are accommodated

Algorithm can be tuned to the network context, with configurable tail displacement and length

Simple Alarm interface, and OSS integration



Specifications Summary

VOICE QUALITY ENHANCEMENT

Channel Capacity	Configurable to up to 320 voice channels
Echo Cancellation	G.168 (2002) Digital Echo Cancellation Hybrid and Acoustic cancellation
Direction of Cancellation	Uni-directional and bi-directional operation
Tail length	128ms—Hybrid echo 512ms—Acoustic echo
Tail offset	Up to 384ms
Level Control	G.169 Automatic Level Control Manual level control
Comfort Noise	Spectrally correct comfort noise
Background Noise	Advanced background noise reduction
Double-talk	Intelligent double-talk detection
Codec	Superior performance with highly non-linear codecs in the echo path
Load dependence	Dedicated per channel processing resources
Environment dependence	VQ performance is independent of language and background noise

PHYSICAL, MECHANICAL AND POWER

Ambient Operating Temperature	0°C to 50°C
Power Supply	Dual, redundant -48VDC -36VDC to -64VDC operating range
Fusing	7.5A Resettable Circuit Breaker per power feed
Rack Mounting	19 inch rack mountable 23 inch rack mountable
Height	88.9mm (2U)
Width	455mm
Depth	350mm

NETWORK INTEROPERABILITY

Signalling	VQUEST 300 is signalling agnostic
Tone Disabler	Standards compliant tone disabler Flexible configuration for user customization (re-enable modes, timeouts etc.) improves interoperability with non-standard equipment User-defined tones
Tandem Free Operation	TFO interoperability for GSM and CDMA networks
Timing	Line-derived with automatic fallback Internal

LINE INTERFACES

Line Rate	2.048Mbps (E1) 1.544Mbps (T1)
Format	G.703 (E1/T1)
Interface Density	Up to 10 x E1/T1 interface per system



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