

# G.729

## Introduction

G.729 is a toll-quality, low-bandwidth audio codec supported by many VoIP providers. The voice quality of a G.729-encoded call is about the same as that of G.711, the codec used for standard PSTN calls. However, the amount of bandwidth needed to carry a G.729 call is much lower than that for a G.711 call. Enterprises using G.729 will make more efficient use of available network bandwidth. G.729 uses roughly 1/8th of the bandwidth of a G.711 (8 kbit/s vs 64 kbit/s).

**DISCLAIMER:** \_This should be considered experimental, as the binary for g729 provided by FreeSwitch is not always compatible with the stable version of sipXcom at version. The current FreeSwitch G729 binaries available from [freeswitch.org](http://freeswitch.org) as of December 31, 2010 will not load on sipXcom 4.2.1. The current binaries available from [freeswitch.org](http://freeswitch.org) will work on (development) version of 4.3.x and later). This is because [freeswitch.org](http://freeswitch.org) does not have available a binary that is compatible with Freeswitch v 1.0.5 as compiled in sipXcom rpm's (4.2.1 and earlier). Freeswitch also does not officially support g729 licensing on the sipXcom platform.

G.729 is available in two ways:

## Passthrough Transcoding

The passthrough method does not require licensing, however it has some limitations. For transcoding method G.729 license is necessary. Freeswitch offers a module and G729 license for transcoding G.729. Freeswitch's G.729 module supports Annex A and Annex B.

## Obtaining License

Licences can be purchased from the FreeSWITCH website - see the G.729 tab at the top of the page. Pricing is \$10 per channel.

A single licence provides you with one encoder and one decoder, which is enough for bridging one call.

Licences are only required for channels performing transcoding (for bridging calls a leg uses G.729 and a different leg uses a different codec, and for applications which need to process media). Bridged channels where G.729 is on all legs still use pass-through mode, so that they do not consume a licence.

## G.729 Module Installation

Download the fsg729-xxx-installer file from <http://files.freeswitch.org/g729>