ITU V.21 and V.23 Software Modules

The GAO V.21 Software Module implements the ITU V.21 recommendation for speeds up to 300bps for use in the GSTN. GAO's implementation for this modem uses frequency shift modulation with the symbol rate equal to the bit rate. The mean frequencies for channel 1 and 2 are 1080Hz and 1750Hz respectively. The modem allows both synchronous and asynchronous procedures.

The GAO V.23 Software Module implements the ITU V.23 recommendation for data signaling speeds of 600bps and 1200bps using the FSK technique. The center frequencies are 1500Hz and 1700Hz. GAO's implementation also supports a backward channel of 75bps.

Bell Software Modules

The GAO Bell 103 Software Module implements the Bell 103 data set for up to 300bps full duplex data communication. This modem operates on two-wire systems using two distinct frequency bands for frequency modulation. This is a split channel modem, like the ITU-T V.21, which uses different frequencies. The GAO Bell 103 Software Module can either originate or answer calls and can be used with a direct connection or by acoustic coupler. The GAO Bell 103 Software Module automatically switches to the originate mode when a call is originated and to answer mode when a call is answered.

The GAO Bell 212A Software Module implements the Bell 212A data set for up to 1200bps full duplex data communication. This modem functions asynchronously, utilizing PSK modulation for its 1200bps mode of operation and FSK technique for its 300bps mode of operation. This modem can also function as a synchronous device in the 1200bps range, and is inter-operable with the GAO Bell 103 Software Module at 300bps. It also supports either manual originate/answer or automatic answer. For the 1200bps option, the GAO Bell 212A module uses the same high and low frequencies as those of ITU-T V.22 recommendation, while the 300bps operation is same as that of the GAO Bell 103 Software Module.

Leadership in Embedded Communications Software

With over a decade of experience, GAO leads the embedded communications software market by providing comprehensive modem, fax, speech, and telephony technologies; broad technical expertise; and unsurpassed support to our world-class customers including electronics, communications, and semiconductor companies across the globe. GAO's software integrates easily with MP3, MPEG, TCP/IP, and most popular real-time operating systems.

Rigorous Testing

GAO's testing facilities are equipped with state-of-the-art test equipment. Our software is rigorously tested on TAS, Consultronics, Rochelle, Advent and Telegra equipment under various channel models according to the relevant ITU or TIA standards. All GAO's speech software has passed the test vectors specified by the ITU. Our telephony software meets all appropriate TIA, EIA, BellCore, and Mitel standards.

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