



## GAO Research Inc. V.42bis Data Compression

GAO Research Inc.

*#1 In Embedded Communications Software*

<http://www.gaoresearch.com>

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### Features

- ▶ String matching
- ▶ Encoding
- ▶ Transfer
- ▶ Dictionary updating
- ▶ Node recovery

### Product Description

GAO's V.42bis software for data compression enhances the performance of error correcting modems by making better use of an often over-crowded communications channel. By using a variable length code to represent fixed length characters, the most commonly transmitted characters are compressed and represented by a codeword much smaller than the conventional bit code. GAO V.42bis encodes a string of characters with a fixed length code. The system uses a dictionary, which has a hierarchical tree structure, to store frequently occurring character strings, along with a code to represent these character strings.

### 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. GAO also adheres to stringent quality control procedures, which is reflected in our well structured code, detailed design documentation, and well-defined design and test plans. This ensures ease of integration into the customer's system, easy maintenance, and a smooth upgrade path for next-generation customer products.

### GAO Research Inc.

601 Milner Avenue, Suite 300  
Toronto, ON, M1B 1M8 Canada

**Tel:** 1-(416) 292-0038

**Fax:** 1-(416) 292-2364

**E-mail:** [info@gaoresearch.com](mailto:info@gaoresearch.com)

**Web:** <http://www.gaoresearch.com>

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