

## **Compress** ...efficient and secure information handling through data compression

- **Reduced Telecommunications Costs**
- **Delay, or Eliminate Installing Additional Lines**
- **Increase Bandwidth of Existing Lines**
- **Increase Data Security**
- **Faster Response Time**

The worldwide marketplace for telecommunications is undergoing rapid change. While the costs for communication lines are slowly decreasing, the demand for additional lines, as well as bandwidth capacity for those lines, is increasing at an alarming rate. This worldwide increase in demand for telecommunications services stresses the ability of the providers to deliver additional lines and/or more bandwidth capacity. The end result today is that telecommunications has become a major expense of doing business.

As companies attempt to maintain a competitive advantage in their marketplace, the security of their data becomes increasingly important. Public networks and satellite links are the overall chosen telecommunication vehicles because of their lower costs and relative availability. However, with the increased use of these facilities, sensitive data has become more vulnerable to access and manipulation by unauthorized parties. Traffic to and from satellites is especially susceptible to access by third parties. Modest and inexpensive equipment is available to anyone who wishes to decipher such messages. Henceforth, the need for data security adds significantly to the cost of exchanging and moving data through the telecommunications channels.

### **Compress # 1 solution to**

**REDUCING telecommunications COSTS and INCREASING data SECURITY.**

### **Compress TECHNOLOGY**

**Compress** provides a unique approach to data compression using an algorithm that recently was awarded an international patent. Traditional data compression techniques use generalized learning algorithms that assume little or nothing about the data with which they are dealing. As a consequence, these traditional algorithms are very often ineffective for use in telecommunications.

The patented **Compress** algorithm was specifically designed for the telecommunications environment. **Compress** uses a multiple level learning algorithm. The first stage learns the standard, commonly used vocabulary and structure from repetitive patterns in the data stream that are unique to the company. For example, the commonly used addresses and headers of an X.25 network would be part of the first level of learning by the Compress algorithm.

Stage two learns patterns that are highly dynamic and change frequently such as customer orders showing differing amounts for different customers with different payment terms, etc..

### **Typical Compress Compression Ratios**

◇ Pure Language Text	3:1 to 5:1
◇ Pure Binary Data	2:1
◇ Pure Image Data	varies and can be as high as 20:1 or more

Data compression results are highly dependent on a two factors: *TYPE* and *MIX* of data.