



# FIBER OPTICS INTRODUCTION & BASICS

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## WHAT IS FIBER OPTICS?



It is the use of thin flexible fibers of glass or other transparent solids to transmit light signals, chiefly for telecommunications or for internal examination of the body. It can transmit data and voice at a longer distance with higher bandwidth. This type of technology provides services such as ethernet, internet, cable tv, and/or telephony services.

## WHO USES FIBER OPTICS?



Fiber Optics is being used by just about everyone. For instance, many telecommunications companies use fiber optics to transmit telephone signals, Internet communication, and cable television signals. Industries such as healthcare, energy, hospitality, and education just to name a few depend on fiber optics for their daily business objectives.



# FOUNDED?



It was founded in Germany in 1965 by a Telefunken Research Labs. It was first used by the United States Government in 1975 in Colorado, they used fiber optics to link a network of computers together in the NORAD headquarters. By the end of the 1990's 80% of our long-distance traffic was being transmitted over fiber. This ended the long-distance charges many consumers had to incur, which became a cost savings.

# FIBER OPTICS?



In the future there will be more optical switches being produced, this will increase the speed of data and voice. This solution is called an “*all optical network*” (AON), which allows data to be processed without any electrical processing of any kind. This amplifies the speed at an even longer distance with an increased bandwidth.



Questions?



## REFERENCES

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