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# Present

Limitations

cannot fix it.

### Where Industry Stands

Deployment of available technology today is the main cause for low grade Internet Services.

- Consumers on an average get 10Mbps download speed and 1Mbps upload speed
- Internet slows down as more and more consumers get on internet. No matter what size internet bandwidth pipe you get.
- This is as Cable TV technology is used to deliver internet!

Industry limitations is due to network architecture and materials used in deploying Network. 95% of connections uses shared connectivity.

**Technology limitations** 

provders and why they

faced by Internet

#### **Present Network Architeture**

- Fiber Copper Hybrid(HFC) uses DOCSIS protocol and CMTS (ports) technology to deliver CATV and Internet signal on copper coax cable.
- This technology delivers average 50Mbps download speeds and 1Mbps upload speeds per connection and usable speed is even lower.
- Internet slows down as more and more consumers get on internet. No matter what size internet bandwidth pipe you get.
- This is as Cable TV technology is used to deliver internet!

### Development

Technology limitations faced by Internet provders and why they cannot fix it.

Docsis is a protocal to move signal on HFC type network.

DOCSIS 3.1 Standard theoritically suggests 10Gbps up and down, is in development stage.

There is congestion at HFC. The only solution is to increase number of POP's or hubs and install throughput Terabyte ports at marine fiber landing stations where availability is limited.

FCC rule mandates providers to remove underground assets if being replaced by fiber optic cable. This is the biggest impedement.



# **Future**

## A need for Speed

With impending deployment of 5G, data in Zeta bytes will be generated from internet of things (IoT) autonomous cars, 3D video conferencing and 3D videos and machine to machine connected data in other words everything will be connected to everything.

In our age of constant connectivity, vast majority of us spend time on the internet every day.

If you have ever wondered why your internet connection slowed to a crawl when streaming Netflix in the living room while kids played on line game upstairs as your spouse downloaded content on his phone, the answer has to do with bandwidth.

In its simplest terms, bandwidth refers to the amount of data (say that new Games of Thrones episode) your internet connection can move in a given amount of time. The larger the bandwidth, the faster your internet connection can move the data.

By far the largest data connection on the internet are **internet backbones --** the physical network that carry Internet traffic between major access points. Your home, for example, connects to the backbone through a network around these major acess points.

Typically made from fiber optic trunk lines with multiple fiber optic cables combined together to increase capacity, Internet backbones have the largest amount of bandwidth --capable of transmitting a tremendous amount of data incredibly quickly.

At Teleric, we're tapping directly into the backbone using fiber optics to bring unheard of internet speed to consumers and businesses around the country.

## **High Speed Matters**

#### Healthcare

Removes geographical barriers and allows patients to receive the medical care they need when and where it's needed.

#### Education

New broadband-enabled educational tools and advances in information and communications technology means that education is no longer confined to the classroom.

#### **Underserved Communities**

Equal access to high speed Internet and communication networks is vital to promoting equal economic opportunity, educational advancement, and democratic participation.

### **Energy & The Environment**

Broadband reduces our carbon footprint while promising substantial economic pay-offs.

#### **Enabling Those with Disabilities**

High speed Internet empowers people with disabilities to become more independent and participate in everyday activities such as employment, education, civic responsibilities and social connection.



# **For Generations**



## **Building A New Internet**

Unlike existing providers whose speeds top out at around 1 Gbps, Teleric offers customers speeds that start at 1 Gbps and go all the way up to a whopping 400 Gbps. This massive boost in bandwidth translates to:

- Faster downloads
- Smoother streaming
- Crisper video calls
- Total communications
- ZETABYTE OF DATA TRANSFER

A fundamental change in the performance of apps on the internet!



# **For Generations**

#### **New Network Architecture**

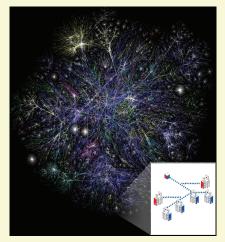
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### **One to Many Connections**

#### **Shared Architecture**

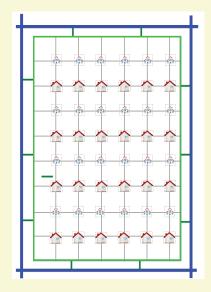


### **One to Many Connections**

#### **Distributed Architecture**

Proposed - Teleric architecture

- 1. International Backbone (Marine cable)
- 2. Backbone ports
- 3. Teleric Internal Backbone
- 4. Teleric optical Grid X-Direction
- 5. Teleric optical Grid Y-Direction





# **Teleric's Innovations**

## Areas of Innovation

### Fiberoptic Cable Design

- Patent filed Reduces cost of fiber optic cable by 90%.
- Have sourced manufacture to manufacture SM fiber core to acheieve price difference.

#### **New Trenching Method**

Teleric's trenching method trenches twenty feet per minute versus 2000 ft per day through horizontal boring or conventional method used by incumbents.

#### **Optical and, Bandwidth Fabric**

Patent filed - Enables, direct connectivity to the internet backbone or marine cable. Industry offers one to many connections, Teleric offers one to one for every connection.

#### **Teleric Port**

Can deliver up to 400 Gbps of bandwidth per connection unshared, Industry standard offering is upto1Gbps bandwidth shared.

#### **Home Data Center**

Internet contents are saved in horizontal type datacenter or saved in Teleric architected micro data center placed on premises.

#### Security

New AI based security architecture Patent filed, makes every user system and surfing opaque. Users can turn OFF and ON advertising pop-ups.

#### **Neural Node**

Optical fabric Neural Node - Patent filed, is a natural solution for massive antannae placement for 5G mm wave deployment and backhaul data transport to Cellular service providers at extremely low costs. Fiber Deployment Areas of Innovation

## Fiber Deployment

#### Out of box thinking

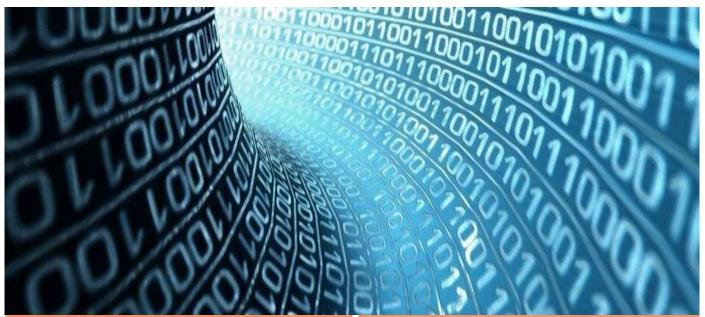
Teleric has simple resource deployment plan for laying fiber. Teleric will train and certify handymen, Electricians, plumbers on propriety Fiber optic deployment methodologies at Teleric laboratory.

### **Trained Technicians**

These trained technicians will be contracted to trench, lay and maintain Teleric fiber network.

Teleric will provide necessary equipment and materials to perform the work.





## Key Technology Advantages

#### **Teleric's All-in-One**

Teleric's unified communications solution will port any and every form of signal through fiberoptic.

#### **1:1 Connection**

Unlike our competitors who have 1-to-many connections -- causing bandwidth to shrink as more and more users get online.

Teleric's connection is 1:1, which means our bandwidth is not only dedicated, superior, but will always remain consistent.

#### Fast

Teleric's hardware is capable of delivering anywhere from 1Gbps to 400 Gbps of bandwidth to any home or structure connected to our network.

#### Affordable

Out technology is inexpensive to both deploy and Implement.

### Key Development Advantages

#### Costs

Costs Teleric \$150 to bring fiber per connection and \$350 for hardware that connects both ends of fiberoptic cable.

**In case of no permission for hanging fiber on poles by pole associations** Teleric will plant its own poles.

It costs \$200 per pole, including time and material.

#### **Patented Fiber Laying Techniques**

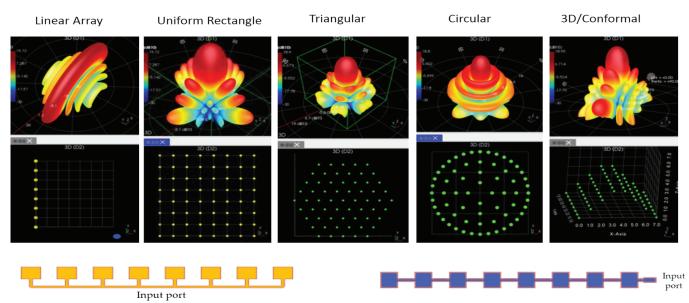
Teleric has tested out a new method of burying fiber in ground. That enables 20 feet per minute for trenching, inserting fiber and refilling trench slot.

#### Offerings

Teleric offers up to 400Gbps of Internet speed, 3D TV, TV Video conferencing, VoIP, IoT and 5G antennae placement.

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## Antenna Elements Arrangements : Various geometries



5G Phased Array Antenna Design

<b>Teleric's 5G Antennae Real estate</b> Teleric will provide extensive furniture for 5G antannae placement within its optical nodes. This is critical for 5G successful deployment.	<b>Limitations</b> Will 5G Replace Land Line Gigabit Optical Network?
<ul> <li>Problems with 5G Signals</li> <li>5G cannot penetrate walls, windows, trees air and other obstacles. It also cannot travel long distances. The signal range is 200 meters.</li> <li>The technology is not fully functional as it has to overcome many technical and engineering issues.</li> <li>Teleric will elevate 5G Deployment Teleric's FR-1000S Switch has a built in micro-cell or 5G radio that provides 5G backbone or data transport to cellular service providers.</li> <li>Infrastructure For 5G Radio technology, denser cell site grids and cells are needed to be connected by fiberoptic cables to carry data from the antennas or cell towers to the provider exchanges.</li> <li>Teleric's optical fabric will allow placement of antennae strategically at every coordinate within the fabric at thousands of nodes. Teleric's fabric will enhance 5G deployment on a wider scale and at extremely low costs.</li> </ul>	5G needs massive backend data transport, such large capacity is not possible with existing CATV network and or internet network which was considered for 5G back end data transport. Teleric network is designed to carry ZETABYTE of data through its network and is a natural choice for 5G data transport!



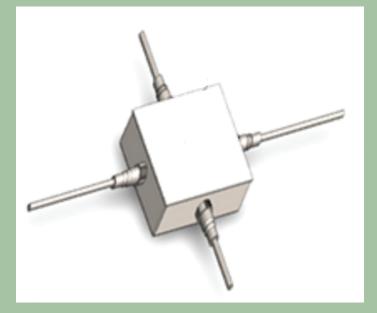
# **Products**

### Teleric's Optical Junction O-1000J (Neural Node) Four way optical bridge

#### Features

This bridge is an important component of optical network.

- Connects to four different fiber optic cables
- Mechanical switching
- Supports SDN
- Throughput 400Gbps





# **Products**

### Teleric's Edge Optical Switch T-1000U

#### Features

- Optical Converter
- Vide Processing
- VoIP
- IoT
- Has its own OS

- Optical Converter
- Vide Processing
- VolP



### **Teleric's Edge Optical Router R-1000A**

- 20GB Throughput ports
- 24 Ports optical Router
- Redundent powersupply





# Nutshell

## **Competetive Edge**

#### **Technology wise**

Teleric is the fastest internet technology in the world!

Presently Teleric can provide 400 Gbps to any connected port wether home or commercial.

No existing incumbents can provide the speed we provide as their nertwork cannot support it. Incumbents will have to ripout the existing copper cables and bury their fibre in its place. This can be extremely costly.

Teleric's technology will facilitate 5G deployment.

#### Hardware wise

Teleric manufactures its own end to end hardware and also it makes its own fiberoptic cable.

#### Service wise

Teleric does not have any electronics underground. Electronics are placed at customer premises and customer pay the electric bill to operate the equipment.

Incumbents are bogged down by service calls as their electroniocs are underground and copper cable needs constant maintenance.



# Nutshell

## **Growth Strategies**

#### **Deployment Strategy**

Teleric will bring fiber to total 19,495 cities, towns and villages (incorporated places) in the United States in next ten years.

Teleric will bring atleast 150 connections in every city, town and village at the cost of \$75,000 each. It will require one week of labor for trenching and digging to bury fiber and installing hardware to homes and connecting to internet backbone.

The operations have a positive cash flow at one hundred fifty connections. Expenses and income will be closely monitored and tightly controlled.

Whole team will consist of one office manager who will run the operations and do sales and customer service and three handymen to trench and install hardware and connect to internet backbone.

Once the network is up and running the crew will continue trenching and laying fiber and completing connections till every home is connected.

#### The idea is Self Sustaining and Growth From Within.

#### **Funding Strategy**

Teleric will do debt funding through local banks so that banks can also benefit.

#### **Technical Support**

Will be centralized and will be done out of corporate office.

#### Billing

Is centralized and automated.