

Superior Network Solutions

Superior Service
Superior Equipment

Service and Equipment Catalog

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1 OUR COMPANY

1.1 Company Catalog

Welcome to our updated catalog that lists Superior Network Solutions equipment services and equipment sales.

1.2 Company Description

What we do

- Superior Network Solutions provides network and computer services and equipment to every business, home, and estate in the Phoenix area.

Why we are different

- We are a local business incorporated by Mark David Barrera in Arizona in 2012. We are not a faceless national chain. We updated our name from Speedy Networks to Superior Network Solutions in 2016.
- We listen to you and explain your options for equipment or service in plain English. No techno-speak. No geeks with an attitude.

Our experience

- Mark is a Network Engineer and your Personal Engineer. He provides solutions and not just a quick fix. See the consulting section in our catalog to compare him to anyone.
- Call Mark today for professional advice without any cost or obligation.

Our reputation

- Superior Network Solutions is honest and ethical. We have been awarded an A+ rating by the Better Business Bureau.

Our licenses

Please visit our Superior Licenses page to download our Federal, Arizona, and Phoenix licenses.

<http://superiornet.us/documents-and-licenses>

Our testimonials

Visit our online testimonials page for comments from our satisfied customers:

<http://superiornet.us/superior-testimonials>

Our consumer websites

Superior Network Solutions has been reviewed and approved for the following popular consumer websites:

- Angie's List

<https://www.angieslist.com/companylist/us/az/phoenix/speedy-networks-llc-reviews-8668768.htm>

- Better Business Bureau

<http://www.bbb.org/phoenix/business-reviews/computers-networks/speedy-networks-llc-in-phoenix-az-1000033383>

- Thumbtack

<https://www.thumbtack.com/az/phoenix/router-setup-install-and-repair/computer-network-installation-support>

- Yelp

<http://www.yelp.com/biz/speedy-networks-phoenix>

1.3 Benefit Package Details

Our Customer Comparison Checklist describes our Superior Benefit Package in detail. Please visit our Superior Documents page to download the latest version:

<http://superiornet.us/documents-and-licenses>

2 OUR BENEFITS

2.1 Our Superior Benefit Package

All of our equipment service and sales customers receive unique benefits when they choose Superior Network Solutions. Our free Superior Benefit Package is included with every purchase. Why pay someone else more to receive less?

2.2 Superior Benefit Package List

Following is a brief description of the benefits included in our Benefit Package:

- Price lock: Know your cost.
- Price match: Local store price but added benefits.
- Technical Support: Free for 30 days.
- Superior Equipment: Better for generic prices.
- Cisco Engineers: Trained engineer.
- Better Business Bureau: A+ rating from BBB.
- Network Drawing: Professional Visio drawings.
- Wireless Scans: Free for optimal settings.
- Wireless Networks: Free multiple networks.

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2.4 Price Lock Benefit

Price Lock is included in our Superior Benefit Package, and is the #1 reason Phoenix selects Superior Network Solutions. We are the only local business that features pre-paid services and equipment sales so your cost is locked-in. We hate when businesses up-sell us or add hidden charges, and you hate it too. With Superior Network Solutions, your heart does not skip a beat when you read your final invoice. We also offer traditional invoicing upon request.

3 NETWORK CONSULTING

3.1 Company Founder

Mark David Barrera created Superior Network Solutions as his consulting firm. Mark uses his 11 years of Network Engineering experience to complete your project on time and on budget.

3.2 Skill Set

Mark has developed his strong management, design, and implementation skills over the course of a decade. He also has strong relationship skills and enjoys serving as a member of a team. He is most well known as the Lead Engineer for the access layer for the new American Express \$1 billion data center based on Cisco Nexus. His network specialties are Cisco Nexus and Catalyst, wireless networks, load balancers, firewalls, and multiple routing protocol networks.

3.3 Past Clients

Mark has been a member of Network Engineering teams for the following:

- Expedia
- US Foods
- Dignity Health
- Hewlett Packard Enterprises
- Honeywell Process Control
- American Express
- Freescale Semiconductor
- Cenvo
- Limelight Networks
- eTelecare Global Solutions

3.4 Education

- Cisco Certified Network Engineer
CCENT CCNA initially certified 2008
- Five Cisco certified training courses \$15,000
CCENT CCNA SWITCH ROUTE TSHOOT
- Arizona State University
Bachelor of Science Electrical Engineering
- Veteran United States Army
HHB 108th Air Defense Artillery Group

3.5 Documentation

The documents are available on our website. Please visit our Superior Documents page to download resumes, certifications, and more.

<http://superiornet.us/documents-and-licenses>

3.6 Contract Information

Mark is available thru Superior Network Solutions for consulting on a 1099 contract. Following are the contract term specifics:

- Onsite: Mark is available for onsite projects for locations within a day trip of Phoenix from 1 to 90 days. Please call for other project lengths. He is not available for onsite projects at any other location outside of Phoenix.
- Remote: Mark is available for remote projects for all locations for any length of time.
- Rate: Competitive hourly rate based on project role requirements such as location, length, and management responsibilities.
- Roles: Member of the staff for a project. Temporary contract for an unfilled open staff position. Mentor for entry-level engineers. Call for other roles.

4 SERVICES CATALOG

4.1 Superior Service for Less

Compare the background of our Cisco Network Engineer to any network professional in Phoenix. In addition, all equipment services include our exclusive Superior Benefit Package described in this document. Call Superior Network Solutions today for superior services for less money. Visit our site for our price list:

<http://superiornet.us/documents-and-licenses>

4.2 Common Network Services

Network Problems

Superior Network Solutions has formal network engineer design and maintenance training. We offer on time and on budget solutions to the following common performance and security network problems:

- **Internet Outage:** As all Phoenicians know, we occasionally have storms that knock out TV and Internet services for large areas of the Valley. Call Superior Network Solutions when you are knocked offline and cannot reach Cox or CenturyLink due to high phone call volume, or are put on eternal hold.
- **Obsolete Devices:** Think of an internal network as a single chain of devices. The network is only as fast as the slowest device in the chain (the bottleneck). Almost every home or business we visit has a device with 100 Mbps ports in the chain. For many years, devices have had 1000 Mbps ports. So that slow device is slowing your network by a factor of at least 10 times.
- **Routers:** All problems including missing or incorrect routes, and incorrect port and VLAN configuration.
- **Switches:** All problems including missing or incorrect default paths, and incorrect port and VLAN configuration.
- **Heat Damage:** If you have to reboot your modem or other network gear continuously it has probably deteriorated due to heat damage over time. We can replace that equipment today.
- **Wrong Modem:** Users sometimes pay Cox or CenturyLink to upgrade their speed and that requires a modem change. We have seen where the provider forgets to swap out the modem, and the user pays for speed they do not receive. We can install the correct modem for your newer speed today for less than your provider.

Network Assessment

Superior Network Solutions provides you with a written assessment that includes:

- summary of security and performance problems
- recommendations for a secure high performance network

Please refer to the Price List for Network Assessment pricing at:

<http://superiornet.us/documents-and-licenses>

4.3 Existing Wireless Services

Wireless Problems

Superior Network Solutions technicians have formal wireless network engineer training. We offer on time and on budget solutions to the following common wireless performance and security network problems:

- **Security:** The number one security threat is that almost everyone uses the same network subnet (same address space such as 192.168.1.x) for the main wi-fi and guest wi-fi. This can be hacked by anyone without your knowledge using free software available at hacker websites.
- **Signal:** Other active networks can use the same frequency or channels as your wireless causing an overlap problem. This can destroy your reception.
- **Traffic:** Smartphones, iPads, fitness devices, and wrist watches automatically connect to the wireless network and create device traffic problems such as:
 - My users complain they cannot connect to my wireless network.
 - My users complain my device will not stay connected.
 - My users complain my wireless network is unbearably slow.

Wireless Problem Service

Superior Network Solutions performs a wireless scan, and uses that info to configure your wireless router for the best frequencies and channels for your specific site. We also change other settings to correct all common security and performance problems. We include a written proposal if additional equipment is required, and if you wish to improve your security and performance. Please refer to the Price List for pricing:

<http://superiornet.us/documents-and-licenses>

4.4 Wireless Installation Service

Wireless Speeds

If you have not replaced your wireless routers within the past 3 years, your wireless router does not support the 2013 speed standard (1300Mbps). If your router only supports the 2009 speed standard (600Mbps) you are 54% slower. If your router

only supports the 2003 speed standard (54Mbps), you are an astonishing 96% slower. Refer to the speed comparison shown in Figure 1.

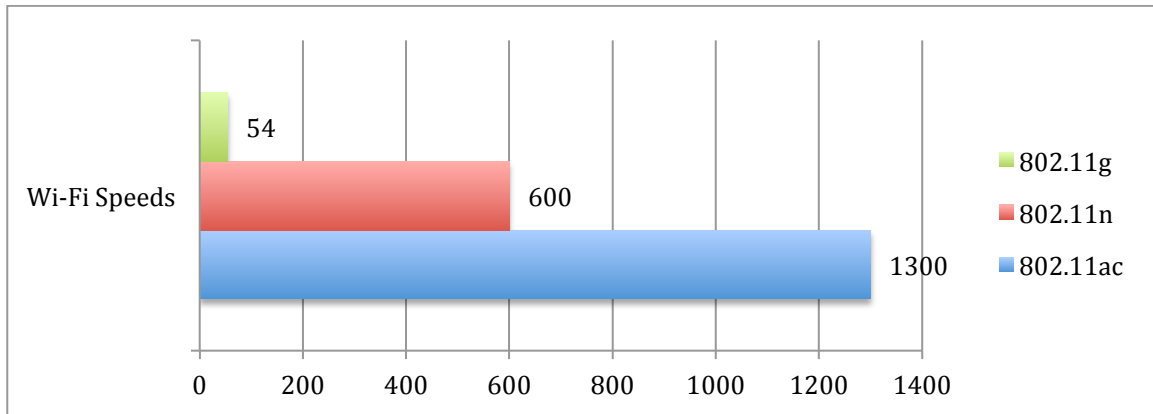


Figure 1: Wi-Fi speeds for current standards

No Charge Wireless Features

Superior Network Solutions includes many features that are not available from other installers, or only at an extra charge.

Security features included as required at no additional charge:

- Address Space: Non-default LAN subnets help to decrease network visibility.
- DHCP Pools: Smaller DHCP IP address pools keep out hacker computers.
- Firewall: Advanced firewall features prevent data and bandwidth theft.
- Guest Security: Security features keep guests from accessing your business.
- Guest Timeout: Timeout features limit the time guests access your network.
- Secure Filters: MAC filtering to specify exact computers for added security.

Performance features included as required at no additional charge:

- Bridging: Modem as a bridge to the wireless router for more speed.
- DDNS: You can connect to your network even when your IP changes.
- DNS: We use consistently faster DNS servers than the default servers.
- Static Routes: Static network routes allow traffic between subnets.
- Channels: We use non-standard channels so your signal does not drop.
- Wireless QoS: Quality of Service for error-free media and game streaming.

No Charge Multiple Wireless Networks

Many sites have a single network that all users and devices share and this leads to constant connection drops and excessive speed loss. Superior Network Solutions creates multiple wireless networks at no charge to separate traffic.

This is a solution to many business problems such as:

- Logins: Employees can login to the employee network without delays.
- Security: Guests on the guest network cannot access the employee network.
- Security: Employees on their network cannot access the executive network.
- Speed: The streaming music network does not slow down the employee network.

This is a solution to many residential problems such as:

- Safety: Parents can limit Internet access for the separate children network.
- Security: Guests on the guest network cannot access the residents network.
- Security: Children on the children network cannot access the parents network.
- Speed: The streaming music network does not slow down the other networks.

CenturyLink Wireless Package

Superior Network Solutions supports every home, estate, and business that depends on CenturyLink for their Internet access. Our specialty for CenturyLink customers is separate modems and wireless routers instead of CenturyLink supplied dual modem/routers. You receive much higher performance at a comparable price. We also supply and service CenturyLink supplied equipment. Installation for other devices such as standalone firewalls and modems the customer has selected is additional. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

Cox Wireless Package

Superior Network Solutions supports every home, estate, and business that depends on Cox for their Internet access. Our specialty for Cox customers is separate modems and wireless routers instead of Cox supplied dual modem/routers. You receive much higher performance at a comparable price. We also supply and service Cox supplied equipment. Installation for other devices such as standalone firewalls and modems the customer has selected is additional. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

Custom Wireless Package

With this package, the customer has researched wireless equipment. They call us to purchase the wireless router and what other equipment they have selected at our competitive prices. We then install it using all of the security and performance features applicable for that specific router and other equipment. Installation for other devices such as standalone firewalls and modems the customer has selected is additional. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

Recommended Wireless Package

With this package, the customer calls us and asks for our recommendations for their specific needs. We determine the specific needs of the client, and then recommend wireless routers and any other additional equipment they may need. We then provide that equipment at our competitive prices. Installation for other devices such as standalone firewalls and modems the customer has selected is additional. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

4.5 Remote VPN Services

We Connect to You

We can setup a VPN connection to your home or business. This allows us to solve a problem at your site without having to travel to your site. This has two major advantages:

- we can immediately go to work on the problem
- you do not have to pay a travel charge.

If your present equipment supports VPN (most do now), then this may not require that you purchase new equipment in most cases.

4.6 Cloud Storage Services

Storage Selection

Many call for free advice to ask about the “cloud.” With cloud storage you copy your files to another storage location via the web. If the originals are lost, you connect to the cloud location via the web and get a new copy. It is difficult to choose a location as some are free, and some require payments. Call and we will explain your options in simple terms, including our setup of automatic backups to the cloud.

4.7 Estate Crestron Services

Crestron Problems

We receive calls inquiring if we service Crestron installations by Crestron owners. Almost the same exact conversation with the owners occurs. Crestron owners tell us

that most of the network works all of the time, but some functions are glitchy, or never did work exactly right. After conversations and my research, the same theme keeps popping up. Crestron installations run two logical networks over the same physical hardware.

Crestron Networks

Two logical networks exist on the single physical network when it is designed per Crestron mandatory requirements per their official design documents. Network 1 is for Crestron device management and is completely walled off from every other network. Network 2 is the normal network for all other traffic at a site.

Many times when Crestron owners see problems, the installers have created just one network against the mandatory two-network rule. It is also possible that the two networks have not been setup correctly. The routers, switches, and wireless must be setup by a Network Engineer to ensure traffic flows correctly. Anything short of perfection, and we guarantee Crestron performance will suffer every time.

Crestron Assessment Service

Mark was one of the Lead Engineers for the new American Express data center. Mark setup AMEX with dozens of networks, and he can setup your two networks today. Our experience includes an estate with the entire Crestron suite and hundreds of devices.

We perform a Crestron Assessment Service to determine the state of your current network that includes our exclusive Superior Benefit Package. Call to solve your Crestron problems today. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

Estate Assessment Service

Large estates have hundreds of devices using their network. Many times specialists plug their devices into the network not understanding how the network functions as a whole. So a functioning network starts to malfunction.

We perform an Estate Assessment Service to determine the state of your current network that includes our exclusive Superior Benefit Package. Call to solve your estate problems today. Please refer to the Price List for pricing at:

<http://superiornet.us/documents-and-licenses>

Estate Wireless

Wireless installations for estates have changed dramatically since 2015. Network professionals are now installing open mesh wireless networks to cover the large expanses of Arizona estates.

Open mesh was originally developed for the military to communicate over vast battlefields, and it has now trickled down to civilian use. The performance increase

over older formats is substantial. Call now to discuss open mesh wireless for your estate.

4.8 Unlisted Service

Please call if you need an equipment service that is not listed in our catalog. We have a Network Engineer on staff and can perform many services others cannot provide.

5 EQUIPMENT SALES CATALOG

5.1 Superior Equipment for Less

When you visit a local store, they recommend what they have on the shelf, and sometimes they recommend obsolete items back in the stockroom.

Superior Network Solutions has business supplier accounts with the largest equipment wholesalers in the nation. In most cases, we can sell you equipment that is superior to local equipment for the same price. In some cases, we can even sell you superior equipment for less than local prices.

Of course, all equipment sales include our Benefit Package described in our catalog. Call Superior Network Solutions today for superior equipment for less money.

5.2 Equipment Delivery

Delivery times typically vary between same day and three days at the extreme.

5.3 Network Equipment

We provide all common and uncommon network equipment including: routers, switches, modems, wireless routers, wireless access points, and firewalls. We also provide smaller items such as Ethernet cable, splitters, and signal amplifiers.

5.4 Network Cables

We often find inferior cables when we visit customer sites. We only sell premium Cat6e cables that are superior to Cat5e cables and can be used for all Cat5e applications. We offer single cables in 9 different colors and lengths up to 120 feet. We offer cable bundles in 5 and 10 cable bundles and lengths up to 14 feet. Visit our secure store to order today.

5.5 Computer Equipment

We provide all common and uncommon computer equipment including: laptops, servers, desktops, towers, and storage drives. We also provide computer components and accessories including: game gear, hard drives, monitors, and keyboards.

5.6 Printer Equipment

We provide printers for home and business including: inkjet, laser, and color.

5.7 Unlisted Equipment

Call us you need any equipment that is not listed. Our national wholesalers can supply almost anything at the price you want to pay.