

S&G Communications

jbush@sandgcom.com
www.sandgom.com
www.nex-gen-services.com

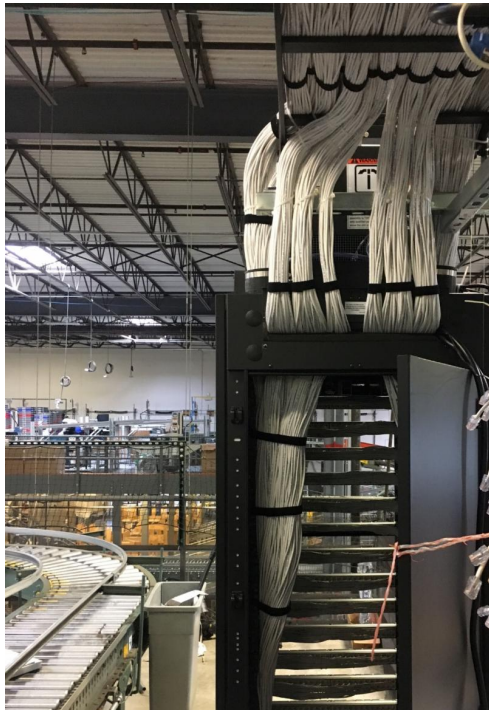
VOICE & DATA CABLING – WIFI - NETWORK SERVICES - VoIP PHONE SYSTEMS

Cabling, WiFi, and Network Solutions for Warehouses and Industrial Applications

Whether your clients are in the market to install network cabling at a new construction building or need to re-cable an existing workplace, we can provide personal consultations and affordable solutions.

Data, Voice & Fiber Optic Cabling

For almost 30 years, our company has installed structured cabling in large manufacturing and warehouse enterprises to include Northwestern Medicine, Esmark Steel Group, Echo USA, Personal Creations, GEA Farm Technology, and more. Our services include:



- Cabling for computers, phones, and wireless access point
- Fiber optic backbones within the facility and demarc extensions for high-speed internet
- Wireless/Wi-Fi network design and installation services, testing and support; knowledgeable in warehouse wireless design with racking and inventory
- Internet service from all the major carriers
- Network firewalls for intrusion prevention, ransomware protection and data loss prevention
- Hosted and premises IP phone systems
- Internal network infrastructure, switches and routers
- We are a **veteran-owned small business** certified by the State of Illinois

Our IBEW Local 134 union technicians are known for their quality workmanship and excellent customer service.

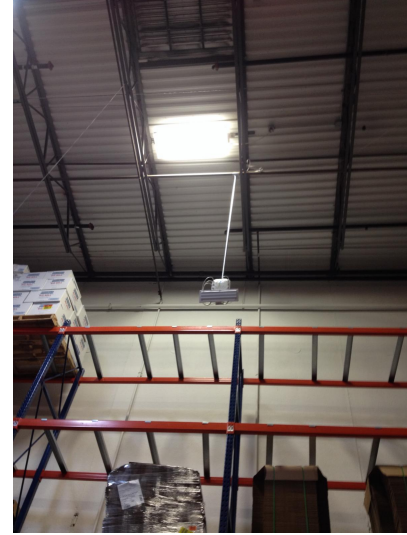


Warehouse Wireless Solutions Designed for Complete Coverage

The biggest challenge to optimal WiFi performance in a typical manufacturing, warehouse, or distribution facility is not only the vast size of the structure. The effect of racks and cages, pillars,

and stored inventory also have an effect on network performance. Added to these challenges is the complexity of the user needs, from inventory scanning to communications to the use of handheld devices, wireless printing, and more.

Identifying a suitable WiFi solution for your facility largely depends on understanding which technologies can meet the needs of your space, your employees, and your business.



Upgrades to Existing Structured Cabling Network

Older cabling can cause problems in your network's speed and WiFi functionality. If you still have some older Cat 5 cables mixed in with your 5e or 6, they can be a source of network slowness.

As the number of devices in your network increases, inadequate cabling can be the cause of performance or reliability issues. If you have 10/100 switches but Gig network ports on your computers, they can be a point of congestion. If you have Gig switches but orange 1 Gig fiber backbones, that 1G fiber uplink can be struggling to support the 24 users on that switch each trying to communicate at 1 Gig.

Newer wireless access points may now be transmitting higher speed data than the network was designed for. It may be time to upgrade your network cable to Cat 6A 10 Gig.

This chart illustrates how upgrading your structured cabling increases your network capability. It's important to know that Cat 6 is compatible with Cat 5, so your cabling network can be upgraded only as needed. We will work on providing a cost-effective add-on solution that fits with your existing network.

Category	Max Transmission Speed at 100 Meters
Cat 5	10/100 Mbps
Cat 5e	1,000 Mbps / 1 Gbps to 2.5 Gig
Cat 6	1,000 Mbps / 1 Gbps to 5 Gig
Cat 6A	10,000 Mbps / 10 Gbps
Optical Fiber Speed	
OM-1	1 Gig Fiber (Orange)
OM-3 or 4	10 Gig Fiber (Aqua)



Cabling

Inspections & Site Surveys

Our certified technicians will provide an on-site assessment of your cabling network infrastructure, investigate and implement measures to avoid problems and, if necessary, make recommendations for repairs or upgrades.

Our Customers Include:

Contact Us

Jack Bush, President

847 459 1220

jbush@sandgcom.com

www.sandgcom.com



We are a Veteran Owned Small Business
certified by the State of Illinois