

## INTELLIGENT BUILDING DESIGN & INTEGRATION SERVICES

Whether you are constructing a new building from ground up or renovating an existing facility, considerable thought must be put into the infrastructure to support 21st Century communications networks. The integration and successful operations of voice, computer, video, security, building controls and related low voltage systems is paramount today. Several of the services we provide clients and business partners in designing and implementing "Smart Building" systems are listed below.

# **Building(s) Structural Design and Architectural Considerations**

- Analysis of Physical Space (square footage, number of floors and buildings, etc.)
- Pathways and Spaces throughout/between buildings (conduits, maintenance holes, vaults, cable trays)
- Computer Room, Telephone Room (MDF), Telecommunications Room (including power and back-up systems, HVAC, fire suppression, security systems, raised floor design, sizing for hardware, etc.), Entrance Facilities, Print/Mail Room, Specialized Laboratories

#### **Cabling Infrastructure and Related Hardware**

- Racks, Cabinets and Termination Hardware
- Copper Cabling Systems (UTP Cat. 5e, 6, 6A (10Gig Ethernet), coaxial, composite or hybrid, other communications systems)
- Fiber Optic Cabling Systems (indoor riser and plenum, outdoor duct/aerial, direct buried)

## **Data Systems, LANs and Related Applications**

- Computer Room/IT Hardware/Systems (Switches, Routers, UPS and Power Protection)
- Remote Telecommunications Room (Wiring Closet) Systems (Switches, Routers, UPS)
- Photocopier/Multifunction Equipment Center Integration

#### WAN, Dial Tone and Other Service Provider Considerations

- In-bound/Out-bound Communications Services (Local and Long-distance Telephony, Dedicated Circuits, Internet, CATV)
- WAN Design and Deployment
- Private Microwave and Wireless Network Solutions

## **Voice Systems and Related Telephony Applications**

- Traditional PBX Systems
- New-generation IP Telephony (Voice over IP)
- Unified Messaging Platform (voice, fax, e-mail access on a common platform)
- Cellular Telephone Repeaters and Systems

## Video/Audio Systems

- Control and Head-end Equipment
- Production Equipment, Teleconferencing, Audio and Satellite Systems

## **Security Access and Surveillance Systems**

- Security Solutions (Door Controls, Intrusion Detection and Alarms)
- Surveillance Systems (Video cameras and controls, remote monitoring)

To learn more about our Intelligent Building Design and Integration Services, please feel free to call 412-781-1050.