Quantum Facility Capacity Maximums:

- 64 Quantum processors can be linked within one facility
- 16,000 stations using a combination of analog station devices and VoIP phones
- 512 non-blocking calls and pages (instantaneous capacity depends on call origination and destination)
- 960 loop start central office telephone lines

Available Schedules, Zones, and Devices:

- 64 multi-purpose zones (page, time, page+time, security)
- 32 schedules, including calendar-based holiday schedules
- 1024 separate schedule events per facility
- 19 unique station device types
- 32 assignable classes of service

Quantum District Capacity:

- 99 interconnected facilities per district

Quantum Deployment:

The Quantum system is extremely scalable and can be deployed to meet the demands of any facility configuration. The Quantum system uses a distributed facility architecture that places processor nodes at appropriate locations throughout the facility and links them together into a single system using the existing network infrastructure. By breaking the system into smaller, local processor nodes, thousands of feet of interconnecting home-run wire, as well as any associated conduit, trenching, surge protectors and installation costs, are eliminated. The scalability of the Quantum processor nodes allows perfect tailoring of the hardware to the local capacity requirement.

Integrated Classroom, Campus, and District Solutions (cont’d)

Integrated Classroom, Campus, and District Solutions

Quantum Commander

Quantum Commander is the web server-based configuration and control application for the Quantum system. The application is accessed through a browser so no special software is needed, allowing access from any computer. Functions relating to manual setup of tones, prerecorded messages, external equipment operation and schedule selection are easily accessed by authorized personnel through an intuitive user interface. Quantum can also allow equipment maintenance personnel remote access to the system reducing the need and cost of site visits.

Student Phones

Telephones can be designated as Student Phones. These phones have unique limitations, such as toll restrictions, length of use and number of calls to the same number within a certain time period. This phone service is designed to allow students to make critical outgoing calls, but reduce abuse of the privilege.

Security Zone Alerts

Quantum has the ability to monitor and alert administrators of any activity in key areas of the facility, such as a computer lab or media center. Security Zones can be installed and connected to appropriate sensors, such as motion or door position, so that any activity will be reported back to designated administrators’ display phones.

Zones, Schedules, and Events

Quantum provides a facility with up to 64 separate zones for time tones and paging, plus 32 schedules providing up to a total of 1024 separate tone events. These capacities allow facilities a large degree of scheduling detail that can be used for ‘school within a school’ applications.

Prerecorded Messages

User-supplied .wav files can be loaded and triggered for playback from either administrative telephones, Quantum Commander, or an external contact closure. These audio files are played back as an emergency level All-Call announcement.

Call-In Confirmation

The Call Assurance Call-In Switch provides visual confirmation that a call-in request has been logged with the Quantum system. Pushing the SC1’s momentary rocker switch initiates a request for service to the Quantum system. The Quantum system then acknowledges this request by signaling back to the initiating SC1, which then illuminates its LED annunciator. The LED will remain lit until the call-in is serviced. At the end of the call, the LED will extinguish.

Classroom Devices

A wide range of speakers, telephones, and call switches are available to fit the specific needs of the classroom, multi-purpose room, zone or outdoor area.

Office Devices

Administrative display telephones, VoIP (SIP) phones, wall displays and room speakers are available to address the needs of the main office and other administration areas.

Quantum District Capacity:

- 99 interconnected facilities per district

Integrated Classroom, Campus, and District Solutions

District-wide Communications

Quantum allows entire school districts to be interconnected providing a way to make district-wide All-Call announcements, All-Call announcements to a single school and point-to-point communications between schools, B.O.E. offices, etc. Up to 99 facilities total can be interconnected into a district.

Upgrade Your Existing MultiCom 2000 to a Quantum System

Existing Bogen MultiCom 2000 school intercom systems can be easily and cost effectively upgraded with Quantum capabilities because it is backwards compatible. With this upgrade, the facility enjoys all the Quantum features, such as network-based control and district-wide interconnectivity.

Expansion of Existing Facilities

New building additions can take advantage of the distributed facility architecture of Quantum by locating hardware near the new classrooms to provide shorter wiring runs and then use the facility’s network infrastructure to link the existing and new sectors into one fully integrated school communications system.

Network Phone Connections

Network connected VoIP phones are also available for Quantum. These phones provide a convenient way of installing phones in areas that already have a network drop.

Network Connections to Remote Locations

Quantum hardware located in classroom trailers can easily connect to the main facility by means of the network drops feeding the trailers. If there are no existing drops, a wireless link can be used to make the network connections and carry the communications as well as the data to the remote classrooms.