New UL 864 & NFPA 72 2010
9th Edition Fire Alarm Control Panel (FACP)

AND

Cellular Communication Regulation Advancements
Legacy POTS Problems

- **FCC's National Broadband Plan: POTS 'not sustainable'**
  - 300-page document says maintaining legacy equipment too costly, inefficient

- **POTS sunset on the horizon?**
  - FCC issues notice seeking ways to phase out 'relics of a by-gone era'

- **IMS Research Projects 20% POTS Line Decrease**

- **End of the Digital Dialer?**

- **Wireless Alarm Transmission Gathers Steam With Demise of POTS**

- **Verizon Boss Hangs Up on Landline Phone Business**

- **The New Generation of Monitoring: Don’t Get Behind The Eight Ball**
Legacy POTS Problems

• Some providers refuse to install analog lines for FACP monitoring in new commercial when fiber or T1 is installed
• FCC approved AT&T POTS sunset request
• POTS and VoIP Voice Compression
• POTS providers dramatically increase monthly costs of services they wish to discontinue to encourage more rapid change
• Phone line power surges cause false alarms
• Central Station failure to receive all signals
“When we receive a signal from a fire panel that our receiver cannot properly interpret because of POTS voice compression, we have no choice but to process it as a possible fire alarm. These false alarms are a waste of Fire Department time and resources.”

Jon Adams, Operations Center Manager
Compatibility

XR500 / 463G Slave Communicator or Network Module compatible with any FACP
26.6.3.1.4.1
Single Communications Technology

Where only one communications technology is used, any failure of the communications path shall be annunciated at the supervising station within 5 minutes of the failure.
How It Works

Primary Fire Cellular Communications with no back-up or no 3\textsuperscript{rd} party server – UL 864

POTS – (Plain Old Telephone Service) Legacy Communications

Protected Premises

GPRS (General Packet Radio Service) (2G) Core Networks

Central Station

INTERNET
SecureCom Coverage Map
The Product

XR500NFC FACP w/463G Cellular
Product Versatility

XR500FC

- Integrated Burglary, Fire and Access Control
- ANSI/UL 864 for Commercial and Residential Burglary and Fire
- Supports all DMP keypads and expansion devices
- May be expanded with Hardware or Wireless Options
Features & Benefits

• Direct Communication to Central Station
  – Fast and direct, no middle point of failure
• GSM/GPRS
  – High availability & coverage area
• No additional box or hardware
  – Simpler to install, uses no additional wall space, saves time & money
• Uses System Battery
  – No additional battery to service/replace
• Local or remote SMA antenna
  – Flexibility at install allows for best reception onsite
Features & Benefits

- **Fully Modular**
  - Adapts to future technologies

- **Upload/Download Over Cell**
  - Manage systems remotely, fully functional, not limited

- **Low current draw**
  - Uses half the current compared to similar product, requires less batteries

- **Messaging Features**
  - Remote control & messaging for building management or maintenance staff
XR500 - A League of its Own

• Same DMP technology approved for “high security communication” in Banks, jewelry stores, Homeland Security and DoD locations

• NIST approved AES Encryption over CELL

Fire UL Listed
And
Burglary UL Listed
Complete Wireless Solution for ANSI/UL 864 Commercial Fire Systems

Advantages of Wireless Fire Devices

• Allows you to place each device where it belongs, not where you can fit a wire… for maximum security
Complete Wireless Solution for ANSI/UL 864 Commercial Fire Systems

Receiver: Up to 1.7 miles line-of-sight range with up to 8 wireless repeaters

ANSI/UL 864 Listed for Control Units for Fire-Protective Signaling Systems
Complete Wireless Solution for ANSI/UL 864 Commercial Fire Systems

ANSI/UL Listed for 864 Fire Protective Signaling Systems

Wireless 1103-W transmitter with supervisory resistor & 3-minute check-in

For fire pull stations

Water flow sensors & valve tampers

ANSI/UL 346 Listed for Waterflow Indicators for Fire Protective Signaling Systems
Complete Wireless Solution for ANSI/UL 864 Commercial Fire Systems

Smoke Detectors
Smoke/Heat Detectors
ANSI/UL 268 Listed for Smoke-Automatic Fire Detectors
Complete Wireless Solution for ANSI/UL 864 Commercial Fire Systems

PIV (Post Indicator Valve): No more trenching

OS & Y (Outside Screw and Yoke)
2-Way Wireless, Internet & Cellular - Better Solutions

• DMP FACP is fully modular and can be quickly updated to newer technologies inexpensively

• Better direct FACP signal transmissions from point A to point B with 5-minute check-ins instead of 24-hour daily tests

• The POTS average communication speed to the Central Station in the first attempted transmission is 20 seconds vs. Internet or GPRS speed of 7 ms
Better Redundancy – Metropolitan areas have multiple cell tower coverage for reliable coverage
Better Coverage – Commercial areas offer the more reliable Tier 2 Internet coverage – When was the last time your PSAP was down?
Our FACP saves money

- 2-way wireless fire alarm devices can dramatically lower installation costs
- Less service calls & waiting for technicians
- Eliminating two POTS lines that can cost the end-user $75 to $125 per month
- Government, School Districts etc. can save tens-of-thousands of dollars annually
Configuration

- Our NET or CELL system can be configured as:
  - Path 1 NET Primary (5-minute check-in) with no Backup
  - Path 1 CELL Primary (5-minute check-in) with no Backup
- UL 864 as a slave communicator compatible with more recent FACP’s
Win-Win for the community and Fire Department

- Reduced fire alarm false alarm responses due to communications malfunctions
- Quicker responses to real fire alarms
- Better life safety for citizens
- More reliable property protection
- Quicker diagnostics with less down time when FACP experiences trouble conditions
Thank You!