



Market Segment:
Healthcare

Country of Installation:
**Mohammed Bin Zayed City,
Abu Dhabi**

Year of Installation:
2020

End customer:
Burjeel Medical City

System Integrator:
SIBCA Electronics

Solutions:
**Public Address and Voice
Alarm System / BGM**

Key Products:
**VIPEDIA-12 NET
V400
MPS01s
WMC-01**

Key Technology:
**EN54-16 PAVA in line
with UAE fire code and
CODE Blue alerts**

Zenitel's multi-purpose PAVA solution saves costs at Burjeel Medical City

The End User

The Burjeel Medical City (BMC) is a Tertiary Care Facility in the heart of Mohamed Bin Zayed City – Abu Dhabi. This has been developed by VPS Healthcare Group – a leader in UAE and the region, Burjeel Medical City is one of the largest private Medical Healthcare Facility in Abu Dhabi. Burjeel Medical City is comprised of a 400 bed Hospital, Long-Term Care Facility, Long-Term Care Villas, an Administrative Building, and a Mosque – all covering a gross floor area (GFA) of 82,000m².

The Requirement

The client aimed to consolidate disparate audio as a PAVA system, integrating both operational and life safety communication into a unified platform. The primary objective was to create an audio solution that is not only inline with UAE fire codes for emergency messaging but also seamlessly facilitated operational announcements, specifically CODE Blue alerts. The key goal was to achieve exceptional acoustics across the entire healthcare facility, enhancing both emergency response capabilities and day-to-day operational efficiency. The system shall be capable of functioning as a standalone system even in case of the failure of the site's IP infrastructure.

The Solution

The Zenitel PAVA system installed at the property consists of a centralized rack within the ASL PAVA portfolio. ASL PAVA products are tested to rigorous safety standards, including EN 54-16, UL, and CSA certifications. They deliver a full range of frequency response, 16bit/48kHz sampling, and high-quality audio processing for crystal clear, high intelligibility message reproduction.

The deployed Zenitel PAVA system at the facility comprises of seven Distributed Rack systems, seamlessly interconnected through the Building LAN network. Each Rack is equipped with a dedicated DSP based audio controller with network card and Modular Class-D Amplifiers.

Within each DSP audio controller unit (VIPEDIA-12), there is integrated emergency message storage capability. This design, dedicated DSP, ensures that the system functions inline with EN54 and UAE fire code requirements and provided a resilient system that maintains functionality even during a catastrophic IP-network failure.

The Zenitel system in the project incorporates 100 zones, each equipped with High-performance Ceiling and Surface Mounted Loudspeakers for PAVA/ Background Music Application.

Additionally, each nurse station and reception are equipped with an IP based paging microphone for local paging to the corresponding department zones, volume control and BGM channel selection functionality.

The media Player located at the Central Rack feeds audio channel inputs to the Local Audio DSP Controller (VIPEDIA-12) from where it is streamed over the Building LAN to the Remote racks.

In summary, Zenitel's PAVA system caters to the client's versatile requirements with a single solution that includes:

- a. **UAE fire code compliant Public Address and Voice Alarm system (PAVA)**
- b. **Code Blue broadcast via IP microphones at nurse stations**

The Result

Zenitel has successfully delivered an EN54 complaint PAVA system in line with local civil defense requirements. Using a single microphone, the medical staff can now manage both life safety announcements such as fire evacuation messages and voice alarms during medical emergencies such as CODE blue announcements. This provides a seamless experience for the medical staff and helps them to streamline hospital operations.

Zenitel's PAVA solutions are designed for high availability with features such as self-diagnostic monitoring inbuilt into the VIPEDIA, giving customer peace of mind of a fully functional system at all times.



Why Zenitel?

Zenitel is well positioned to drive the future of intelligent critical-communication solutions. Through our portfolio of IP products & solutions, with built-in intelligence and a focus on cybersecurity, we provide organizations with superior, scalable security and flexibility. Zenitel is the proven, preferred choice for environments requiring crystal-clear audio to ensure the protection of human life, property, assets and the management of critical activities. With interoperability at all levels, we seamlessly integrate with access control, video management and security platforms