



# Tropicana City Mall

Shifts into Digital with MOTOTRBO



"Motorola is a superb partner for radio communications because they have an edge over the rest for communication technology and a proven successful track record. We were satisfied with their analog radio system," says Andrew Ashvin, Senior Manager, Operations of the Tropicana City Mall, "but like other leading organisations, striving for improvement in all areas is a constant need! Micro-D responded effectively by introducing the MOTOTRBO, a remarkable proposal in satisfying our need to take internal radio communication to the next level – digital. The migration process from analog to digital was smooth. If the digital radio technology wasn't coming from Motorola, we wouldn't have confidently pursued it."

## Background

A suburban mall located in Petaling Jaya at Selangor, the Tropicana City Mall is a new entrant to the Malaysia's vibrant retail scene. It is a retail extension of the Tropicana City, a mixed commercial development comprising 600 service suites and 12 office floors.

This 4-storey mall stands on 600,000 square feet of gross floor area with 1,700 car park bays in its two basement levels and a direct underpass link to an additional 1,700 car park bays in the Tropicana City Business Park. Given its ample car parking and with Carrefour as the anchor tenant complemented by a great mix of fashion brands and eateries, the mall is drawing the crowd in droves.

## The Challenge: Ensuring Security and Service with Reliable Communications and Timely Response

To upkeep the mall facilities and maintain a high standard of services, it takes a work team of security personnel, maintenance crew, customer service staff and cleaners working together behind the scene. Quite frequently, they need constant communications, often in noisy environments, to maintain the efficiency and responsiveness necessary for a well-rounded shopping and dining experience.

But as the work team started to expand, their communication needs began to grow beyond the channel capacity provided in their existing fleet of Motorola GP2100 radios. The mall recognized the urgency to resolve the channel congestion and cater for an expanding user base.

## MOTOTRBO Deployment at a Glance

**End User:**  
Tropicana City Mall

**Solution Partners:**  
Micro-D Technologies (M)  
Sdn Bhd  
Radii Teknologi Sdn Bhd

**Project Location:**  
Selangor, Malaysia

**Solution Features:**  
Talk group privacy,  
expanded capacity,  
superior audio performance,  
extended talk time

**User Benefits:**  
Easy migration,  
affordable solution,  
greater productivity,  
flexible future enhancements

**Website:**  
[www.tropicanacitymall.com](http://www.tropicanacitymall.com)



## MOTOTRBO Solutions: Migrating to Digital Radio Communications for Expanded Capacity with 50% Cost Savings

When the Tropicana City Mall approached Motorola authorised distributor, Micro-D Technologies (M) Sdn Bhd, their requirements dictated more radio repeaters and licensed channels be added to their analog radio infrastructure.

Micro-D proposed the more cost-effective option of migrating to MOTOTRBO digital solutions instead. After the demonstration of MOTOTRBO's expanded capacity and enhanced functionalities, the mall required no further persuasion. They could see how a single digital repeater does the work of two on the same channel spectrum. The result is 50% cost saving just from equipment setup and licensing fees, as compared to expanding the existing analog radio infrastructure.

Over a short span of three weeks, Micro-D worked with Radian Teknologi Sdn Bhd, a Motorola Premier Gold Partner to install, test and commission MOTOTRBO solutions in the Tropicana City Mall.

The mall's new digital radio system comprised 1 unit of XiR R8200 Repeater, 1 unit of XiR P8260 keypad radio model and 63 units of XiR P8200 non-keypad radio models. User training was conducted over 3 days to accommodate the large work teams and their demanding schedules.

*"With this innovative digital solution, each department has their own talk group, allowing for the easy convenience and added security of private and group calls whenever the situation arises. The value of talk groups became so important, we were rolling out five talk groups to support over 60 users working in the different functions of security, car park, maintenance, complex management as well as customer service and marketing," explained K.Y. Pang, senior manager of Micro-D.*

## Channel Efficiency for Talk Group Productivity

Thanks to its Time-Division Multiple-Access (TDMA) digital technology, the mall is able to enjoy twice the calling capacity with their existing channel licence. The utilization of a MOTOTRBO repeater doubles the number of voice users, with the opportunity to increase the number of users even further if needed. Moreover, a second call does not require a second repeater, so the mall saves on equipment.

## Enhanced Digital Functionalities for a Reliable Communications

Of particular concern is the need for the car park crew to monitor and respond to emergencies immediately.

*"So when they are patrolling through the maze of car parking bays at the two basement levels, MOTOTRBO digital error-correction technology can accurately deliver their calls even as signal strength drops off with distance. MOTOTRBO also features background noise suppression to help ensure their voice communication comes through loud and clear in noisy environments with static and noise rejection," added Pang.*

One of the biggest challenges with portable devices has always been battery life. But since MOTOTRBO radios only uses half the battery power of an analog system transmitting at the same wattage, there is 40% more talk time to last the users during the duty shift and beyond the mall's operating hours.

Telemetry solutions is one of the many remarkable applications made possible with digital technology that extends the power of MOTOTRBO. Already Micro-D has future plans to enhance the mall's digital radio capability with new telemetry solutions, enabling customisation is in the next phase of deployment and ensuring maximum radio efficiency for the mall.

With their new MOTOTRBO radio system, the Tropicana City Mall is able to help their work groups improve response time and increase productivity, while providing the quality of service and enjoyable retail experience for their visitors.



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