

# Modern Living Meets Life-Saving Responders

*Today's modern construction of new buildings use energy efficient materials but those materials are also the cause of weakening cellular and, more crucial, emergency response signal throughout.*

## DILEMMA

During the construction of the luxury apartment complex Optima Kierland in Phoenix, Arizona, the building's special system contractors Gruber Technical Services recognized the need to enhance emergency response signals.

Concern:

- Need for emergency response radio signals to penetrate and cover required areas within the building, as part of AHJ (Authority Having Jurisdiction) building code requirements
- Per AHJ requirements, buildings must have a signal of -95+dbm, with 99% floor area radio coverage in critical areas - Optima Kierland signal readings showed weak and spotty coverage, as low as -102dbm

## SOLUTION

Gruber worked with technical solutions consultants company for a product recommendation and support. After assessing the situation, they recommended Surecall's Guardian3 Quick Response (QR) amplifier, an affordable public safety band bi-directional signal solution that would solve the signal requirements and improve coverage up to 80,000 sq. ft.

The Guardian3 QR meets the code for Chapter 24 Emergency Communications System of the NFPA72 (National Fire Protection Association) and includes a National Electrical Manufacturers Association (NEMA) 4-rated amplifier housing. The Guardian3 QR is also FirstNet ready, proving it a sound solution for the project.

To meet the AHJ requirements and for a building of its size, Gruber installed four Guardian3 QR amplifiers. These amplifiers helped the building meet – and exceed -- the local AHJ requirements, with a reading of -65dbm.

## RESULTS

Optima passed the first inspection performed by the city, ensuring the safety and wellbeing of its residents. Overall, Gruber was very impressed with the quality of the Guardian3 QR, the ease of installation, and support they received. The installation makes Optima not only an energy efficient building, but also safe and accessible for emergency responders.



## CUSTOMER

For more than three decades, Optima has been developing, designing and building some of the most striking urban and suburban luxury residential communities in the United States.

Gruber Technical Services has been designing major data centers since 1984. With roots in the Mainframe Computer industry, Gruber has years of experience designing optimum environments for serious technological applications.

## ABOUT SURECALL

SureCall is the multi-patented industry leader in cell phone signal boosters, combining high quality technology with innovative designs to create award-winning boosters that dramatically improve cell phone reception, including voice or 4G data, for homes, cars and businesses.

## Guardian3 QR

Guardian3 QR Public Safety signal booster ensures crucial two-way radio connectivity for first responders with coverage in large buildings up to 80,000 sq. ft.

- Boosts 700 MHz (FirstNet Ready), 800 MHz and 900 MHz SMR
- Meets Chapter 24 Emergency Communications System of NFPA 72
- NEMA 4 rated amplifier housing - No additional enclosure(s) needed
- 80 dB amplifier supports 100+ users per band
- Automatic gain control (AGC)
- Independently adjustable frequency attenuation
- Remote Monitoring with Built-in SureCall Sentry remote monitoring system and Ethernet connection
- UPS port for external battery backup
- Integrated 7-pin alarm



**Guardian3 QR**

SureCall's latest innovation, the Guardian3 QR, is a Bi-Directional Amplifier that services the full Public Safety 700 MHz and 800 MHz bands as well as the 900 MHz SMR (Specialized Mobile Radio Service) band. The Guardian3 QR meets Chapter 24 of NFPA 72 standards, improving weak First Responder signals for critical and non-critical areas within the building.

## PRODUCT SPECIFICATIONS

Product	Guardian3 QR
Uplink Frequency Range:	788-805 / 806-824 / 896-901 (Including D Block)
Downlink Frequency Range:	758-775 / 851-869 / 935-940 (Including D Block)
Supported Standards:	Public Safety 700 and 800 and SMR 900
Maximum Gain:	80 dB
Gain Adjustment:	31 dB
Cable:	SC-400 (not included)
RF Connectors:	N Female (both ends)
Power Consumption:	50W
Dimensions:	21.5 x 17 x 6 inches
Weight:	49.6 lbs
FCC (USA):	RSNFORCE3-PSB

Specifications are subject to change. Specifications contained within apply only to products meeting the latest FCC Certification Guidelines of 2/20/2013.