

CMWBD-038-3-NJ DAS Solution For New Doha International Airport

Case Focus

The Challenge

Qatar now has a brand new airport which has replaced the older Doha International Airport. Hamad International airport was constructed four kilometres from the existing facility on a 5,400-acre site and has replaced Doha International Airport as Qatar’s only international airport. As part of this aviation expansion plan the new airport features a state of the art full DAS system which will cater for both commercial and public safety communications. As part of the overall solution there was a requirement for specific multi-band antennas which will offer up unrivalled performance and whilst being unobtrusive and sympathetic to the overall modern building design.



The Client



Nokia Siemens Networks is a multinational data, networking and telecommunications equipment company headquartered in Espoo, Finland. It started as a joint venture between Nokia of Finland and Siemens of Germany, and now has operations in around 120 countries. One such site based in Qatar were awarded the contract to implement a full DAS communications system for the new Hamed International Airport in Doha. Nokia Siemens Networks, recognising, that Panorama Antennas have a worldwide reputation for manufacturing excellence in this field selected them as the main antenna supplier for the final communications systems.

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The Antenna CMWBD-038-3-NJ

Panorama’s CMWBD-038-3-NJ allows businesses and facilities to support multi-service/multi-operator wireless coverage. A huge number of services are supported from 380MHz UHF to 6GHz - including TETRA UHF, GSM900, AWS 1700MHz, Quadband GSM, 3G UMTS, 2.4GHz WLAN, LTE & WiMAX etc. enabling simultaneous connectivity for employees, consumers and emergency services and providing in-building service providers and DAS installers with a convenient one-size-fits-all solution.

This versatility makes in an ideal solution for the demanding environment of a busy airport, particularly for critical communications.

Electrical Data	
Frequency Range (MHz)	380-520, 698-960, 1710-6000
Peain Gain: Isotropic	2dBi (380-520MHz), 4dBi (698-960MHz), 7dBi (1710-6000MHz)
Pattern	Omnidirectional
Mechanical Data	
Dimensions (mm)	Height: 150 (5.9" in), Diameter: 266 (10.5" in)
Material	Geloy PC/ASA (meets UL746C f1)
Flame Retardance	UL94-V0 (chlorine and bromine free)
Terminal Data	
Fixing	N socket lock wheel
Termination	N socket

The Solution

The new Doha International Airport is a response to a projected demand for additional international passenger capacity to the region. The older Doha airport handled 4.2 million passengers a year, whereas the new airport will be able to handle 24 million a year after the first phase of construction. After its ultimate development in 2015, the airport will handle 50 million passengers, two million tons of cargo and 320,000 aircraft landings and take-offs each year. As part of this development Panorama have supplied their multi-band based antenna type CMWBD-038-6-NJ for installation within the new facility. Network integration was carried out by Nokia Siemens Networks and for QTEL (Now Ooredoo) and will form part of Ooredoo’s TETRA/DAS system deployment for public safety and commercial coverage within the airport.

