New Asian Service Provider Selects Raisecom for 4G/LTE Small Cell Backhaul

Raisecom’s switches allow the mobile network to scale fast and cost effectively

A new Asian service provider deployed a large scale 4G/LTE mobile network. In order to provide high speed mobile data, the service provider included a dense small cell overlay, particularly in locations with high mobile traffic like malls, business centers, highly populated residential areas and more.

The large scale of the small cell deployment meant there were very exacting requirements from the small cell backhaul network. For one, each switch had to be small enough to fit into both indoor and outdoor cabinets, but also have a sufficient port density that could support multiple small cells. In addition, the backhaul switches had to support zero touch activation, so that time to deploy and expertise required from the many field technicians would be reduced. In order to maintain service accuracy for the mobile network, a clocking function was essential.

Another unique feature of the large-scale deployment was the requirement for IPv6 support. Since so many new devices would be deployed, the network was expected to run out of IPv4 addresses. The service provider also wished to tier services and required DSCP/VLAN based CoS for prioritization of traffic. The backhaul was deployed in an add/drop or ring topology for redundancy, so had to support G.8032 rings.

Raisecom’s RAX711L EDDs and switches met all of the service provider’s requirement in the most cost-effective manner, and were selected for the project. The small form factor yet highly port-dense switch is hardened, for effective use in both indoor and outdoor cabinets. The switches supported all of the advanced features necessary for the small cell backhaul network including built-in 1588v2 clocking, zero touch activation, support for CoS as well as IPv6.

In trials the Raisecom equipment proved fully interoperable with the existing aggregation switches and the service provider was able to quickly set-up and activate backhaul nodes, which was critical for the accelerated deployment timeline.
Highlights:

- Small size hardened switches that can be installed in outdoor and indoor cabinets
- High port density to support multiple small cells with each backhaul switch
- Zero touch activation
- Built-in 1588v2-TC clocking
- Differentiate between multiple CoS
- Support for IPv6
- Complete interoperability with aggregation switches

Alex Grinshtein, Raisecom Global Director of Solutions and Pre-Sales said:

“Green field deployments in mobile are more exacting than any other kind of deployment we seen. In this case, there was the extremely large scale as well as an accelerated timeline that required a highly intelligent and feature packet backhaul switch. We’re extremely proud to have met all of the service provider’s requirements, and to have done so cost-effectively.”