

# Broadnet France Uses Magnum 4K-Series Ethernet Switches for Wireless Network Management

## Broadband Communications

### TECHNOLOGY TODAY

Wireless broadband networks, like wired networks, require management to ensure top performance and high availability. The alternatives are to use the network itself to carry management information, or set up a parallel network for management information only. The latter approach provides redundancy should the network go down, ensuring the availability of field as well as central management access, even in the event of a network failure.

### ABOUT BROADNET

Broadnet Europe is a next-generation, pan-European telecommunications solutions provider. Focused on delivering flexible connectivity to businesses, Broadnet offers high-speed Internet access and tailored e-business services in Europe's major cities. Broadnet is based in Brussels, Belgium. Broadnet France is based in Paris.

### THE CHALLENGE

Broadnet France needed a compact, simple LAN switch to install in its remote base stations and on customer premises to support network-wide access for network management data. The company wanted to ensure that both centralized element managers and technicians on site would be able to communicate with every device for maintenance, management, and troubleshooting.

Because of the diversity of locations where the switches would be installed, Broadnet needed equipment that would operate using its available -48VDC power used by its telecommunications equipment, and that would tolerate industrial environmental conditions. Broadnet France turned to GarrettCom Europe to find a solution.

### THE SOLUTION

Broadnet chose the Magnum 4K-Series Ethernet switches to cross-connect all management traffic at each remote base station site, and then connect to the wayside channel of a radio link to the next site in the loop. This network-wide connectivity provides visibility of, and access to, network management traffic for the entire broadband wireless network from any site in the network.

Ethernet switches were chosen (rather than hubs), to provide basic traffic segregation, as data flow was predicted to be high and performance needed to be maintained at a high level.

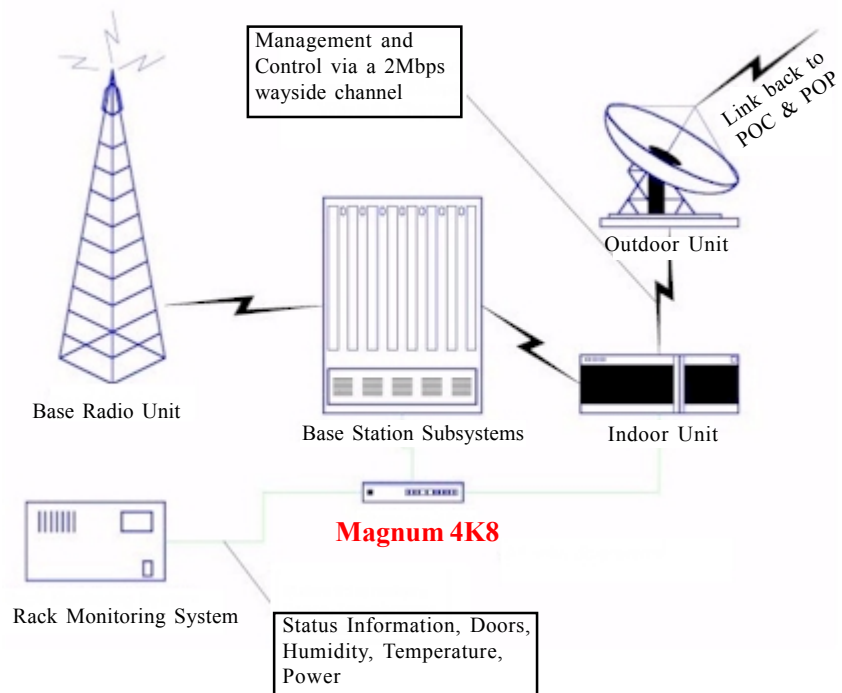


Diagram 1. Broadnet uses Magnum 4K8 in its network.

## Wireless Network Management

BroadNet France

### THE RESULT

Broadnet deployed Magnum 4K24 Ethernet Switches in their Point of Connection (POC) (see diagram 2) and the Magnum 4K8 Switches at base stations (see diagrams 1 and 2). The company is pleased with the clean, reliable solution that the Magnum Switches provide. The Magnum 4K8 and 4K24 Carrier-Class Ethernet Switches offer numerous benefits, including:

- Mixed-media connectivity to support local installation requirements (fibre and RJ-45)
- Built-for-reliability design that meets NEBS and ETSI requirements for telecommunications equipment (5 years MTBF)
- Compact 4.4cm H x 43.2cm W x 9.0 D (1.75"x17"x9") package; 19" 1U
- Extended-range operating temperature rating to withstand industrial environments
- 36-70V DC internal power supply

### MAGNUM 4K-SERIES SWITCHES

The Magnum 4K-Series of Carrier-Class Switches are NEBS Level 3 and ETSI Certified, and provide convenient increments of 10/100 RJ-45 ports to meet configuration requirements, as well as optional configurable 100Mb fibre ports. Designed for flexibility, these rack-mount units may be configured "forward" (ports and LEDs front) or "reverse" (cables in rear, LEDs in front).

To meet telecommunications specifications, they are available with -48VDC power and dual-source -48VDC power, and can be configured to fit the 19" RETMA rack-mount, ETSI, or 23" Telco rack-mount. Low EMI and a MTBF of more than 5 years allow these units to be deployed with confidence in sensitive, high-availability applications.

### ABOUT GARRETTCOM

GarrettCom, Inc. is the leading supplier of Carrier-Class and industrial Ethernet LAN products. GarrettCom designs and manufactures a comprehensive line of ETSI and NEBS Certified switches and hubs for use in telecommunications, industrial, and automated environments. GarrettCom markets its products through a network of OEMs, system integrators, resellers, and distributors worldwide. GarrettCom Europe is located in the United Kingdom. To learn more about GarrettCom Europe, please visit [www.GarrettCom.co.uk](http://www.GarrettCom.co.uk). For more information on GarrettCom and its Magnum products, visit [www.GarrettCom.com](http://www.GarrettCom.com).

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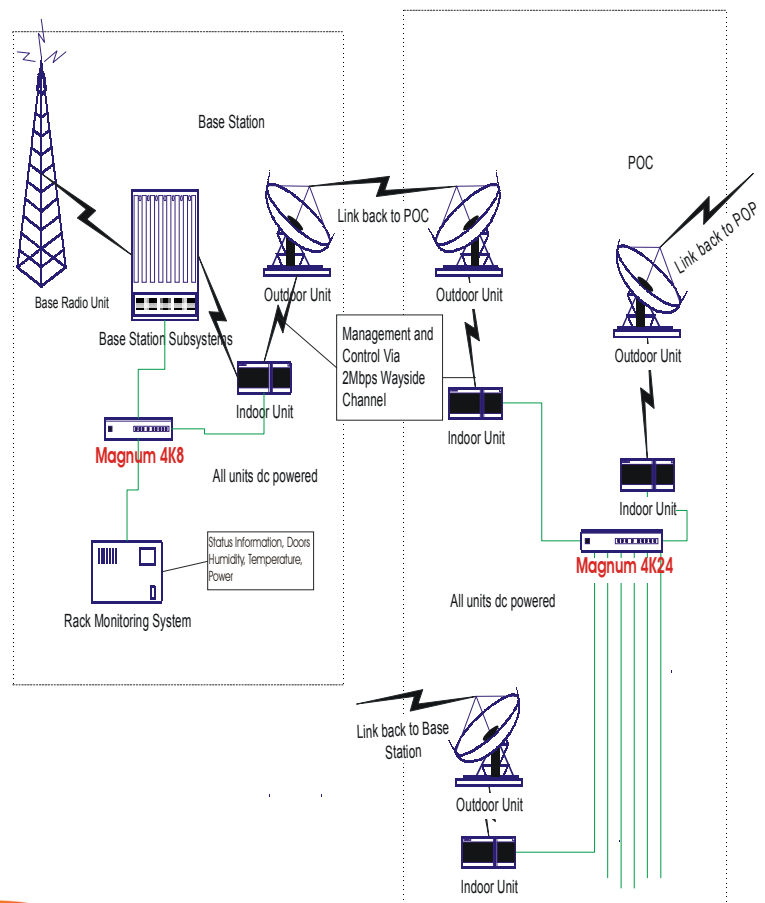


Diagram 2. Magnum 4K8 and Magnum 4K24 Switches.



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