



Horizon 3G-nx macro Outdoor

Motorola's macro outdoor UMTS HSPA+ Solution

The Motorola Horizon 3G-nx macro Outdoor is designed to maximize deployment flexibility by providing a secure, environment proof enclosure with support for up to 24 UMTS HSPA+ carriers.

Benefits

Physical Design

Motorola's UMTS HSPA+ macro Outdoor enclosure uses the same major field replaceable units as the macro Indoor unit and provides a secure, weatherproof environment in which to operate. The enclosure has been designed for flexibility allowing numerous different configurations to be supported in a small footprint.

Easy and Quick Deployment

The macro Outdoor is delivered ready to use with all internal cables installed to meet customer requirements. The only field installation required is to fix the cabinet in place, insert the boards and connect the external cables prior to downloading the data configuration file, thus reducing installation time and the overall network rollout time.

Functionality

Like its Indoor counterpart, the Outdoor enclosure supports various RF configurations and is capable of supporting a number of Remote Radio Units. Furthermore, the macro Outdoor has one of the highest power efficiencies of any currently available macro Outdoor Node B product on the market.

Network Service Protection

An optional battery backup system is available for the macro Outdoor enclosure.

Additional Equipment Support

The Outdoor enclosure supports up to 7U of Communications equipment within the enclosure and facilitates the -48VDC supply for these units.

Availability

With typical configurations the Horizon 3G-nx offers availability of >99.999%.

Controlled Cost of Ownership

Optimized Spares: The enclosure uses the same major field replaceable units as the Horizon 3G-nx macro Indoor frame.

Highly Scaleable: The enclosure provides for most capacity requirements and flexible configuration options enable the Horizon 3G-nx macro Outdoor for optimized initial rollouts and subsequent site expansion to support increasing traffic densities. The frame can support up to 24 carriers (8 carriers in 3 sectors, or 4 carriers in 6 sectors).

High Quality Service Provision

Robust Service Provision: Redundancy from baseband 'pooled resource' and N+1 backup mode ensures that subscribers experience consistent and high quality UMTS HSPA+ network access and service delivery. An optional battery backup enables the service provider to tailor the site to their exact requirements.

Specifications

Horizon 3G-nx macro Outdoor



Size: 1400mm (H) x 600mm (W) x 480mm (D)
Weight: ≤210kg (excluding batteries)
Power Supply: -48VDC, 220VAC, 110VAC
Power Consumption: 1.5kW (maximum)
Operational Environment: -40°C to 45°C
ETSI EN 300 019-1-3 Class 3.1 (Operational Indoor)
ETSI EN 300 019-1-4 Class 4.1 (Operational Outdoor)
Type Approval:
Type Approval: ETSI EN 301-908
EMC: ETSI EN 301 489-1
Safety: EN60215, IEC60215, EN60950, IEC60950, EN50385, IEC50385
Environmental Approval:
2002/95/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment
2002/96/EC waste electrical and electronic equipment WEEE
94/62/EC Packaging and packaging waste

Radio Specifications

Supported Frequencies: 2100MHz, 850MHz
Maximum Number Cells: 24
Maximum Number Carriers: 8
Maximum Number Sectors: 6
Transmit Diversity: Optional
Receive Diversity: Two Path, Four Path Optional
MIMO: 2x2 Optional
Maximum RF Output Power: 80W
Receive Sensitivity:
Single Path: -125dBm
Two Path: -128dBm
Four Path: -131dBm

Capacity

Downlink Peak:	28.8Mbps (2x2 MIMO)
	21.6Mbps (64QAM, 15 Codes)
Uplink Peak:	5.76Mbps
Channel Elements:	Downlink: 1536
	Uplink: 1536

Ancillary

Remote Radio Units: Supported
Remote Electrical Tilt: Supported
Customer Equipment Space: Up to 7U
Internal Battery Backup: Supported
Mounting: Floor
Backhaul: E1, T1, STM-1, FE



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