Horizon 2G RAN controller

The Horizon 2G RAN controller; Motorola's high performance GSM network controller solution

Motorola's Horizon 2G RAN controller hardware platform and software architecture offer high levels of system performance, scalability, capacity and integrity.

The Horizon 2G RAN controller supports the evolution of the radio access network, providing high performance data network capabilities.

Motorola Horizon 2G RAN controller Benefits

Scaleable Capacity
The Horizon 2G RAN controller is modular in design and provides scaleable expansion capabilities supporting up to 2048 Transceivers and up to 15,360 PDCH making it a highly flexible platform that grows with demand. Expansion is realized by simply adding relevant modules and thereby optimizing CAPEX.

Coverage and Capacity features
Motorola's Horizon 2G RAN controller supports a wide range of coverage and capacity features including extended range cell, dual band (900MHz and 1800MHz), half rate and AMR.Understandably, the Horizon 2G RAN controller also supports GERAN developments, GPRS and EDGE.

Multiple Networking Modes
Based on E1/T1 or STM-1 networking, the Horizon 2G RAN controller and associated base stations may be connected using star, chain and tree networking topologies providing high deployment flexibility.

Operational Reliability
The Horizon 2G RAN controller delivers carrier grade system reliability. The system features fault detection and fault isolation to improve reliability and maintainability.

Economical
In addition to providing high capacity to size ratio, which makes it easy to site, the Horizon 2G RAN controller uses the latest designs to reduce power consumption.

Service-Oriented Configuration
The configuration of the Circuit Switched domain (CS) service and Packet Switched domain (PS) service is flexible. The system can be configured according to the requirements of voice and data services in different phases of network roll-out. The Horizon 2G RAN can be configured with an embedded PCU to support the PS service and can also support external PCUs.

Horizon 2G RAN controller Specifications

Specification	Value (maximum)
Number of Transceivers Supported	2,048
Traffic volume	13,000 Erlangs
Busy Hour Call Attempts (BHCA)	3,500,000
Number of subscribers	650,000
PDCH Supported	15,360
PDCH Connection Supported	8,192
Gb Throughput in Mbps	512

Cabinet	Height:	2200mm
	Footprint (W x D)	600mm x 800mm
	Weight:	120kg (unequipped) 320kg (fully equipped)
	Environmental:	-5C to +55C (Operating)
	Power:	-48/60VDC
Environmental	ETS 300 019-1-3 Class 3.2 Operational Indoor	
	ETS 300 019-1-2 Class 2.3 Transport	
	ETS 300 019-1-1 Class 1.3E Storage	
Type Approval	I-ETS 609-1	
Noise	< 7.2 bels (sound power level), meeting the requirement in ETS 300 753 / ISO 7779	
	< 65 dBA (sound pressure level), meeting the requirement in GR-63-Core/ANSI S1.4-1983	
EMC	Exceeds the requirements of EU Directive 89/336 EEC	
	Exceeds the requirements of ETSI EN 300 386 V1.3.2 (2003-05)	
Safety	Exceeds the requirements of EU Directive 73/23/EEC, the Low Voltage Directive	

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