

Horizonmacro

Outdoor 12-Carrier Base Station



High performance GSM coverage and capacity,
in a high-capacity, flexible outdoor enclosure

Motorola's Horizonmacro Outdoor 12-carrier Base Transceiver Station (BTS) is a compact enclosure that can house up to two complete indoor BTS cabinets.

The exterior cabinet also provides the backhaul facilities (6U of 19" space, 4x -48V power supplies), power systems, heat management systems and battery backup required for an outdoor cell site.

Using the highly successful Horizonmacro architecture, the Outdoor 12-carrier BTS offers cost of ownership benefits provided by Motorola's unique optimum link balance of transmit power / receive sensitivity and macro configuration flexibility. Motorola's coverage and capacity software features are supported on this platform, including extended range cell and the superior synthesiser frequency hopping algorithms.

Horizonmacro Outdoor 12-Carrier Features and Benefits

- Single-box, 12-carrier solution containing up to two indoor Horizonmacro BTS cabinets.
- Field Replaceable Unit (FRU) commonality with the Indoor product reduces equipment spares and training requirements.
- Quick and easy installation. Low profile for unobtrusive exterior, available in a range of environmentally sympathetic colours.
- No routine maintenance requirements.
- 6U of 19" internal communications equipment space and 4x -48V communications equipment power supplies.
- Optimum link balance for transmit power with outstanding receive sensitivity ensures: quality call performance, even at the cell fringes, and maintenance of the macro power requirements at an effective minimum, both resulting in savings of power associated OpEx.
- Motorola's unique range of flexible cabinet configurations ensures a match of network service requirements to infrastructure deployments and avoids under-utilised CapEx spending.
- Dual-band in a single cabinet provides reduction in backhaul requirements with associated CapEx and OpEx savings.
- Plug-in components allow for easy expansion up to 24 carriers.
- General Packet Radio Services (GPRS) ready (CS3 & 4 with no hardware changes), which saves on future upgrade costs.
- Motorola's extensive experience in GSM system design ensures product reliability.

Horizonmacro Outdoor 12-Carrier Feature Specifications



Frequency	EGSM 900 GSM 1800	Receive 880 – 915 MHz Transmit 925 – 960 MHz Receive 1710 – 1785 MHz Transmit 1805 – 1880 MHz
Configurations	Up to 24 carriers per site Up to 12 carriers per sector/Up to 6 carriers per indoor cabinet Up to 3 sectors per indoor cabinet/Up to 6 sectors per site Up to 3 sectors of EGSM900 + 1 sector of GSM1800 or up to 3 sectors of GSM1800 + 1 sector of EGSM900 per cabinet	
Transmit Power	40W at antenna connector (single carrier, EGSM900) 20W at antenna connector (2 carriers combined, EGSM900) 32W at antenna connector (single carrier, GSM1800) 16W at antenna connector (2 carriers combined, GSM1800)	
Rx Sensitivity	-107dBm minimum guaranteed (EGSM900) -108.5dBm minimum guaranteed (GSM1800)	
Cabinet	Height: 1400mm (non-stackable) Footprint: (W x D) 1900mm x 800mm Weight: 710kg (fully loaded) Environmental: -33°C to +45°C Power: 88 to 264Vac (45 to 66 Hz), single or 3-phase	
Environmental	ETS 300 019-1-4 Class 4.1 Operation Outdoor ETS 300 019-1-2 Class 2.3 Transport ETS 300 019-1-1 Class 1.3E Storage	
Type Approval	I-ETS 300 609-1	
EMC	Exceeds the requirements of EU Directive 89/336/EEC relating to Electromagnetic Compatibility amending Directives 91/263/EEC, 92/31/EEC, 93/97/EEC Exceeds the requirements of ETS 300 342-2	
Safety	Exceeds the requirements of EU Directive 73/23/EEC, the Low Voltage Directive Exceeds the requirements of EN 41003, EN 60215 and EN 60950	

A wide range of supporting products is available for special applications, including:

- External Battery Enclosure (extends backup time up to 4hrs)
- High performance Masthead Amplifiers (EGSM900 and GSM1800)
- Antennas: Single and dual-polarised, multi -sectored, indoor distributed
- Diplexers, triplexers and cable systems

For further information visit:

www.motorola.com/networkoperators



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