



PROPERLY PROTECT FIXED EQUIPMENT FROM THE ELEMENTS

MOTOROLA BUILDING ENCLOSURES

One of the critical factors for providing reliable communications during normal and emergency situations is to adequately secure and protect your equipment from the environment. Motorola's equipment enclosures enhance system performance by minimizing equipment malfunction downtime due to environmental changes such as a lightning strike during a storm.

To provide organizations with an enclosure that meets your unique equipment requirements, Motorola has developed two choices in building designs: Motorola Standard Buildings (MSB) and Motorola Alternative Buildings (MAB).

Cost effective designs – Motorola building enclosures are designed to meet most industry and local codes, ensure efficient equipment installation, maximize interior space and reduce installation time. In addition, the MAB enclosure provides a low cost base solution with the ability to add the upgrades you choose.

Scalable packages to meet your needs – Begin with a basic MAB model and modify it with specific upgrades to tailor the building for your unique requirements or choose the more complete MSB enclosure. The designs have already been drafted and pre-approved to meet state building codes, reducing the approval and certification process.



SOLUTION DATA SHEET
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Predesigned and equipment ready –

Our building systems have been pre-designed to meet the most current edition of Motorola's R56 Standards and Guidelines for Communication Sites, including cabling facilities, back-up power sources, grounding, and complete electrical systems and surge suppression. Your fixed radio equipment can be installed at the building manufacturing plant or on site.



Building electrical entry points have appropriate surge protection to protect the equipment from outside surges and spikes.

Specific electrical configurations for wireless equipment –

The power requirements are based on the load calculations for each specific building type and system configuration. Individual load distribution centers allow for proper allocation of electrical power and easy identification of the breakers. Separate receptacles with dedicated circuits are installed for convenient powering of the equipment.



For convenient powering of the equipment, individual receptacles with dedicated power circuits are installed in a raceway system above the equipment racks.

Backup power for emergency operations –

Uninterruptible Power Supply (UPS) is designed to prevent critical equipment downtime. The UPS instantly powers the equipment load in case of power failure until a stable power source is available. Different UPS sizes are recommended depending on the building size and power requirements. Building configuration has been sized with an outdoor standby generator with an automatic transfer switch in case of utility power failure.



Motorola Alternative Building 10x12 foot with an optional outdoor generator based on the selected equipment load configuration.

Single point grounding – The enclosures are built with Motorola's specifications for single point grounding, which requires all internal equipment grounds to terminate on a single ground bar and for all cable penetrations into the shelter to also ground to the same bar.

Multiple manufacturing locations reduce shipping costs – Multiple strategically located facilities manufacture MSB and MAB enclosures, which can reduce freight cost and speed delivery, as well as provide you with prompt warranty support.

BUILDING SPECIFICATIONS

Motorola offers a comprehensive portfolio of building enclosures that addresses the needs of today's communication environment. Whether you need a building to be constructed on site or fully assembled, Motorola has the right combination of expertise, options and resources to protect and house your fixed network equipment.



Motorola Alternative Building (MAB) – is a lightweight fiberglass aggregate panel shelter, fully scalable and tailored to your specific requirements.

MOTOROLA ALTERNATE BUILDING (MAB) AVAILABILITY

BUILDING SIZE (W X L)	GENERATOR	RACK CAPACITY
10 x 12 ft	External Generator Optional	4
10 x 16 ft	External Generator Optional	6
12 x 16 ft	External Generator Optional	8



Motorola Standard Building (MSB) – shelter sets the industry standard as an all inclusive concrete shelter that provides maximum protection for your equipment.

MOTOROLA STANDARD BUILDING (MSB) AVAILABILITY

BUILDING SIZE (W X L)	GENERATOR	RACK CAPACITY
12 x 10 ft	External Generator Included	4
12 x 16 ft	External Generator Included	8
12 x 24 ft	External Generator Included	12
12 x 32 ft	External Generator Included	16
12 x 36 ft	External Generator Included	20
24 x 32 ft	External Generator Included	32

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FEATURES

	MOTOROLA ALTERNATIVE BUILDING (MAB)	MOTOROLA STANDARD BUILDING (MSB)
Floor and Loadings	200psf wood with i-beam skid perimeter Optional concrete upgrade	300psf concrete design
Roof and Loading	100psf galvaneal steel with membrane	150psf solid concrete
Seismic Design	Group 1 – Category D of International Building Code (IBC) Seismic Design optional upgrade	Group 1 – Category D of International Building Code (IBC) Seismic Design optional upgrade
Walls and Loadings	120 MPH wind loading; galvaneal steel with exposed aggregate fiberglass panels exterior	150 MPH wind loading; 4 in solid concrete with exposed aggregate exterior; level 4 bullet resistant; 2 hour fire rated
Grounding	Meets or exceeds R-56	Meets or exceeds R-56
Electrical Service	Integrated load center includes TVSS, power panel	Utility power panel, TVSS, enclosed circuit breakers as safety disconnect all separate components
Surge Protection	Type 1 Transient Voltage Surge Suppressor Type 2 surge suppression optional upgrade	Type 1A and Type 2 surge protection Primary surge protection for control wiring/generator Type 3 surge suppression optional upgrade
Exterior Outlets	One 20A GFI duplex outlet	Two 20 A GFI duplex outlets
HVAC	Fresh air, thermostat controlled exhaust fan system Optional single or dual HVAC upgrade	Redundant (2 units) system HVAC economizer optional upgrade
Emergency Lighting	One twin bulb with battery EXIT sign located over doorway	One twin bulb with battery EXIT sign located over doorway
Alarms	No standard alarms Optional Upgrades available	Standard: Smoke, Power Fail, High/Low temp, intrusion, tower lights, HVAC, TVSS, Generator, Automatic transfer switch, UPS alarms, and external ground bar anti-theft relay
Safety Equipment	Eye wash and first aid kit Optional upgrade for fire extinguishers	Eye wash and first aid kit and 2 fire extinguishers per room
Floor Insulation	R-11	R-4
Wall Insulation	R-11	R-11
Ceiling Insulation	R-19	R-19
Generator	Optional Upgrade available	Standard Indoor generator room optional upgrade
UPS	Optional Upgrade available	Standard
Cable Tray Size	18 in Wide	24 in Wide
Warranty	2 year structural 2 year interior (HVAC, generator, TVSS, UPS) Optional Structural Warranty Upgrade	10 year structural 2 year interior (HVAC, generator, TVSS, UPS)

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