CMA-2102SB

SwiftBroadband Compliant Satcom High Gain Antenna System

A high performance, high gain, electronically steerable, phased-array antenna providing full hemispherical coverage in a single, low-profile installation.

- Supports Inmarsat multichannel SwiftBroadband, Swift 64, Aero-H and Aero-H+ satellite communications services
- Exceeds Inmarsat performance specifications
- Conforms to the Inmarsat System Definition Manual for SwiftBroadband operation with ARINC 741 and ARINC 781 radio equipment
- Identical coverage as the industry leading CMA-2102 high gain antenna with enhanced PIM performance
- Field-proven reliability: MTBF in excess of 100,000 hours
- Top-mounted antenna with single Beam Steering Unit and Type-F Diplexer/LNA
- No coverage blind spots even at edge of satellite coverage
- True top-mount design virtually eliminates multipath interference
- Utilizes ARINC 741 footprint to maximize gain performance critical to quality of service on longhaul routes
- Comprehensive Built-In Test (BIT) with easy to access, front diagnostic BSU port available to maintenance personnel
- Simple upgrade for existing CMA-2102 or CMA-2102LW users

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Featuring
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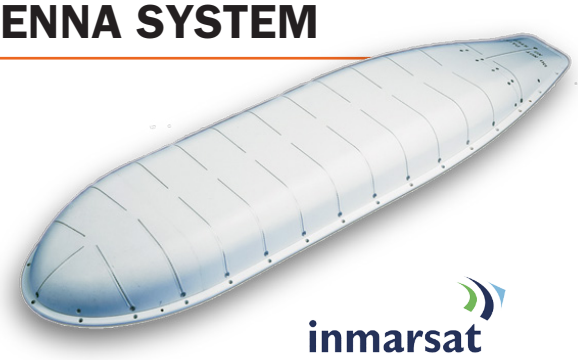
Products

CMA-2102SB SATCOM HIGH GAIN ANTENNA SYSTEM



FREQUENCY

Receive	1525.0 MHz to 1559.0 MHz
Transmit	1626.5 MHz to 1660.5 MHz

SERVICE COVERAGE

Seamless coverage, independent of aircraft direction over more than 90% of the specified Inmarsat hemisphere. No keyholes. Conforms to ARINC 741 and ARINC 781.

GAIN

Between 12 dBiC and 17 dBiC over 90% of the Inmarsat hemisphere.
Minimum 9 dBiC over 100% of the Inmarsat hemisphere.

POLARIZATION PERFORMANCE

Right hand circular. Axial ratio is less than 6.0 dB for all steering angles and all frequencies of operation within coverage region.

MULTIPATH REJECTION

Exceeds 12.9 dB rejection at 5 degrees elevation.

BEAM SWITCHING

50 microseconds maximum.

PASSIVE INTERMODULATION (PIM)

Exceeds Inmarsat requirements for multichannel SwiftBroadband operation.

SATELLITE DISCRIMINATION (Sidelobe Suppression)

Exceeds 13 dB over coverage region.

AERODYNAMICS

The radome shape has been chosen to optimize aerodynamic performance.

INSTALLATION

Single top-mounted antenna requires only one 1" (25 mm) diameter access hole for RF and power/control cables. Easy connector access via removable panel. Single Beam Steering Unit can be located up to 100 ft. (30 m) remote.

UPGRADE FROM CMA-2102/2102LW INSTALLATION

The CMA-2102SB is the simplest, most cost effective upgrade to SwiftBroadband for existing CMC antenna installations.

OPTIONS

Adapter plates, connector kits and mounting racks available on request

UNIT CHARACTERISTICS	High Gain Antenna	Beam Steering Unit	Diplexer / LNA
Length	67" (170.2 cm)	ARINC 600 2 MCU	11.05" (28.1 cm)
Width	18.5" (47 cm)		7.76" (19.7 cm)
Height	4.75" (12.1 cm)		1.97" (5 cm)
Weight	49.4 lb (22.4 kg)	6.0 lb (2.7 kg)	7.5 lb (3.4 kg)
Power Consumption	45 Watts	12 Watts	12 Watts

For further information, please send your request to: **cmc.sales@cmcelectronics.ca**

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