



*“Approved for multichannel SwiftBroadband operation”*

## CMA-2102SB

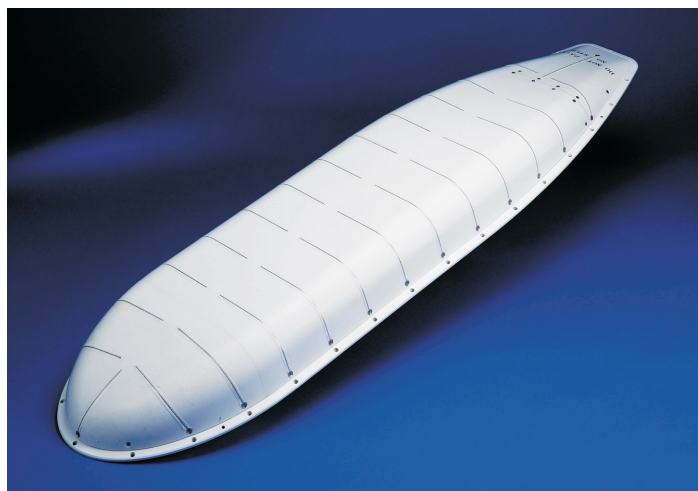
### SwiftBroadband Compliant Satcom High Gain Antenna System

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

- 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



- Supports Inmarsat multichannel SwiftBroadband, Swift 64, Aero-H and Aero-H+ satellite communications services
- Exceeds Inmarsat performance specifications
- 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 Diplexer/LNA



# CMA-2102SB SATCOM HIGH GAIN ANTENNA SYSTEM - SPECIFICATIONS

## 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.

## 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)		11.05" (28.1 cm)
Width	18.5" (47 cm)	2 MCU	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)
Form Factor	ARINC 741 compliant		Type-F
Power Consumption	45 Watts	12 Watts	12 Watts



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For information purposes only. To accommodate product improvements, specifications are subject to change without notice.  
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