

*World's Leading Manufacturer of Fibreglass Whip Antennas*

# 54-Foot Self-Supporting Whip Antenna AS-5088/FRC

## TYPICAL APPLICATIONS

- Broadcasting
- Ground to air
- Civil defense
- Shore to ship

The Valcom Military Grade Antenna, Type AS-5088/FRC, is a rugged, field-proven 54-foot (16.6 M) epoxy fibreglass, vertical antenna for maritime, aviation and general communication use. The antenna was originally designed for the United States Military which had the requirement for an extremely rigid antenna that could reliably withstand high winds and ice loading, without causing serious detuning of the associated matching network.

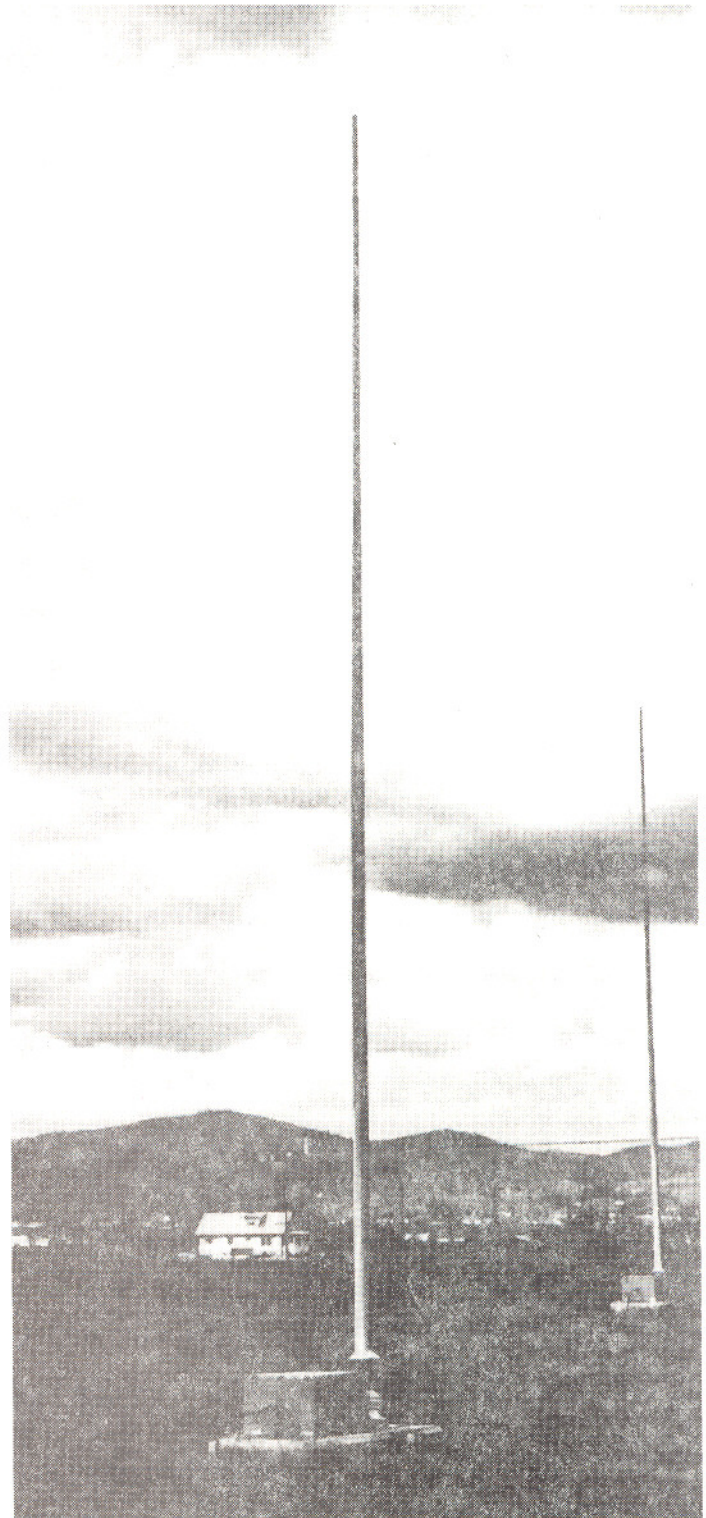
Valcom applied the experience gained from many years with the successful design of antennas for environments ranging from Arctic cold to desert heat. The result is the AS-5088/FRC, designed for service with 0.75 inches (1.87 cm) of ice and winds of 100 MPH (160 KM). It will withstand full hurricane force winds of 150 MPH (240 KM).

The antenna is constructed of three epoxy-fibreglass sections, joined together with molded-in bronze screw joints. The base mounting flange is all epoxy-fibreglass and is formed by an unbroken extension of the same high strength filaments of fibreglass used in molding the bottom antenna section. The result is an exceptionally strong, light-weight, one-piece base design, eliminating the heavy, fragile brass-porcelain insulator traditionally found in antennas of this type.

The AS-5088/FRC is rated at 10 KW and is supplied with an above-the-base feed. Normally, Valcom Antenna Couplers — the manually tuned CU-5091/FRC or the preprogrammed CU-5109/FRT — are used to match this antenna to any 2 - 30 MHz, 10 KW transmitter. The CU-5091/FRC is ideal for fixed frequency operation as retuning requires a maximum of thirty minutes. The CU-5109/FRT provides fast preprogrammed tuning of less than thirty seconds and is excellent for broadband communications. The heavy duty, hinged, galvanized baseplate, Type VHB-17, is available to facilitate rapid installation and maintenance. Valcom's VGS36-100 Ground Screen is recommended to complete the installation.

## FEATURES

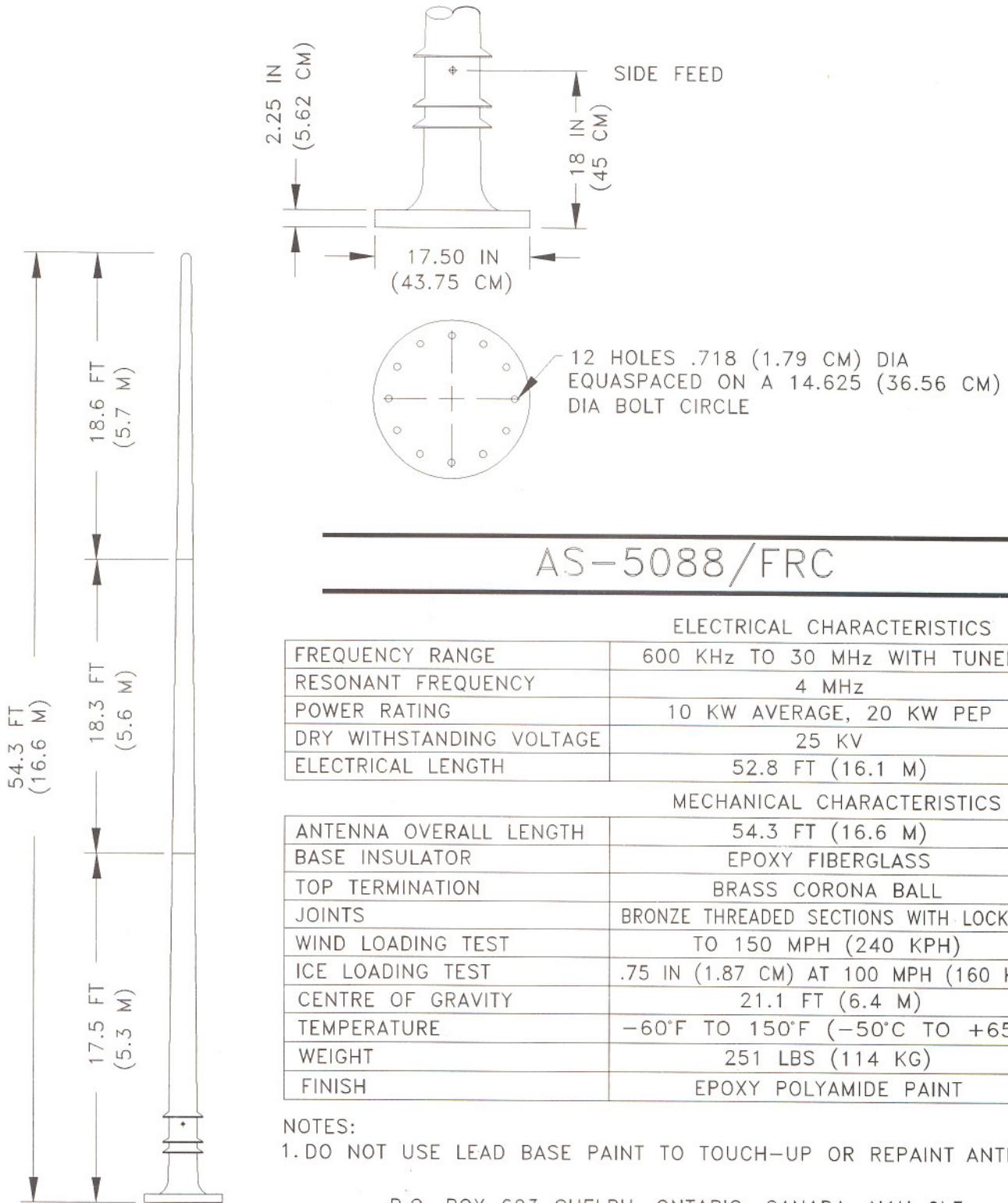
- Field-proven
- Extremely rigid construction
- Light weight
- One-piece base
- Ruggedized for military environment
- Low cost installation
- Low cost maintenance



NSN 5985-21-872-6360



# AS-5088/FRC QUICK REFERENCE DATA



## AS-5088/FRC

### ELECTRICAL CHARACTERISTICS

FREQUENCY RANGE	600 KHz TO 30 MHz WITH TUNER
RESONANT FREQUENCY	4 MHz
POWER RATING	10 KW AVERAGE, 20 KW PEP
DRY WITHSTANDING VOLTAGE	25 KV
ELECTRICAL LENGTH	52.8 FT (16.1 M)

### MECHANICAL CHARACTERISTICS

ANTENNA OVERALL LENGTH	54.3 FT (16.6 M)
BASE INSULATOR	EPOXY FIBERGLASS
TOP TERMINATION	BRASS CORONA BALL
JOINTS	BRONZE THREADED SECTIONS WITH LOCK PIN
WIND LOADING TEST	TO 150 MPH (240 KPH)
ICE LOADING TEST	.75 IN (1.87 CM) AT 100 MPH (160 KPH)
CENTRE OF GRAVITY	21.1 FT (6.4 M)
TEMPERATURE	-60°F TO 150°F (-50°C TO +65°C)
WEIGHT	251 LBS (114 KG)
FINISH	EPOXY POLYAMIDE PAINT

#### NOTES:

1. DO NOT USE LEAD BASE PAINT TO TOUCH-UP OR REPAINT ANTENNA.

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