

Rhombic Antennas

HF rhombic/sloping vee wire dipole antenna, 2 x 105 m, 2–30 MHz

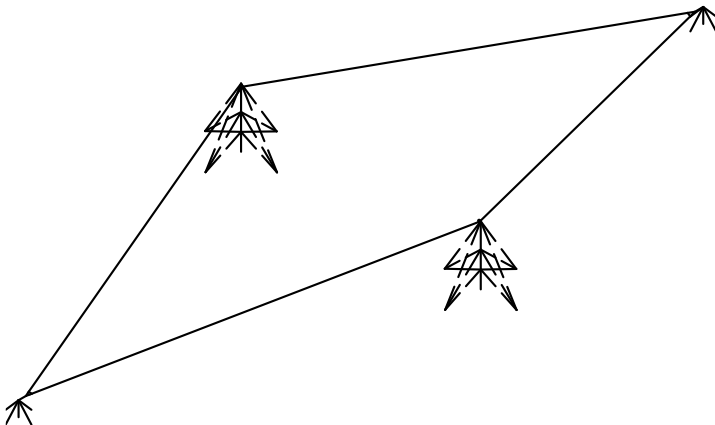
Tactical Antennas: Tactical and Base Station



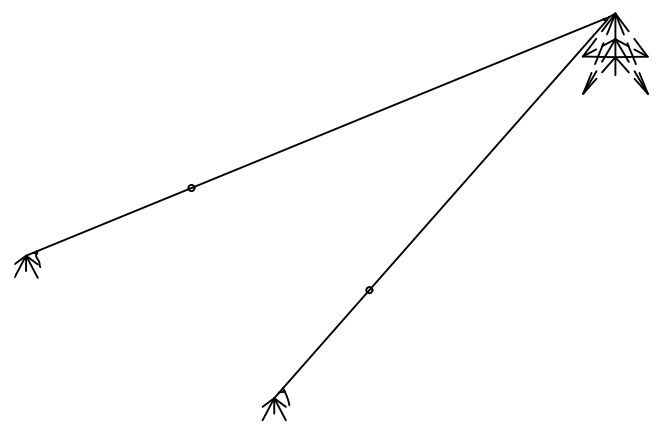
Description

Directional tactical wire antenna, designed for long-range point-to-point communications. This antenna can also be installed in Sloping Vee.

Rhombic Antenna
Reference F3435-76350

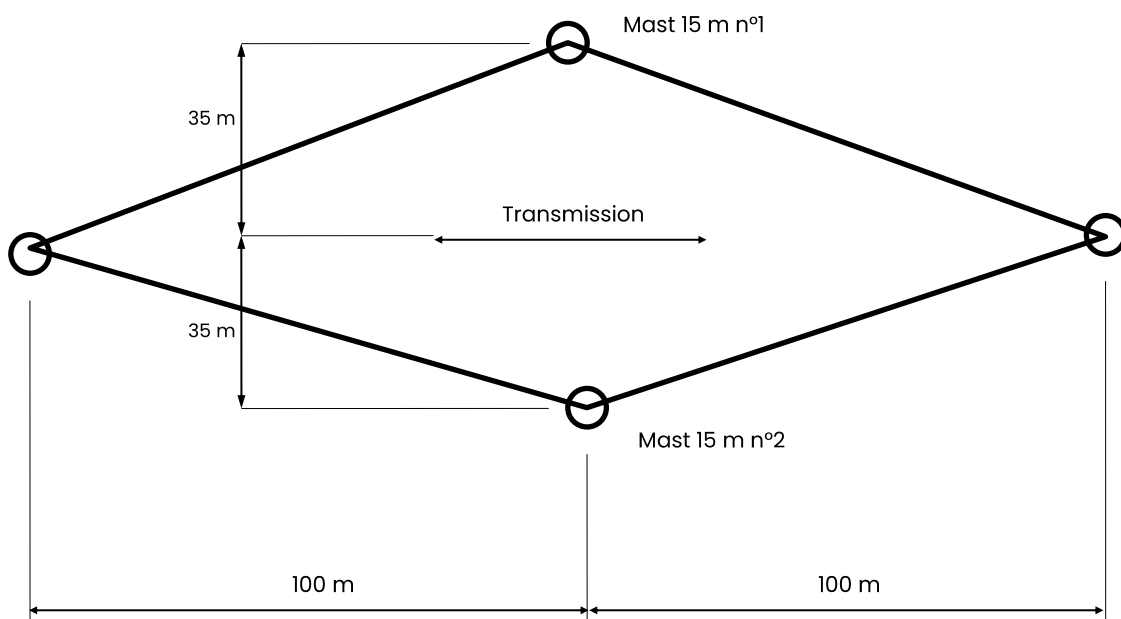


Sloping Vee Antenna
Reference F3435-63508



Dimensions

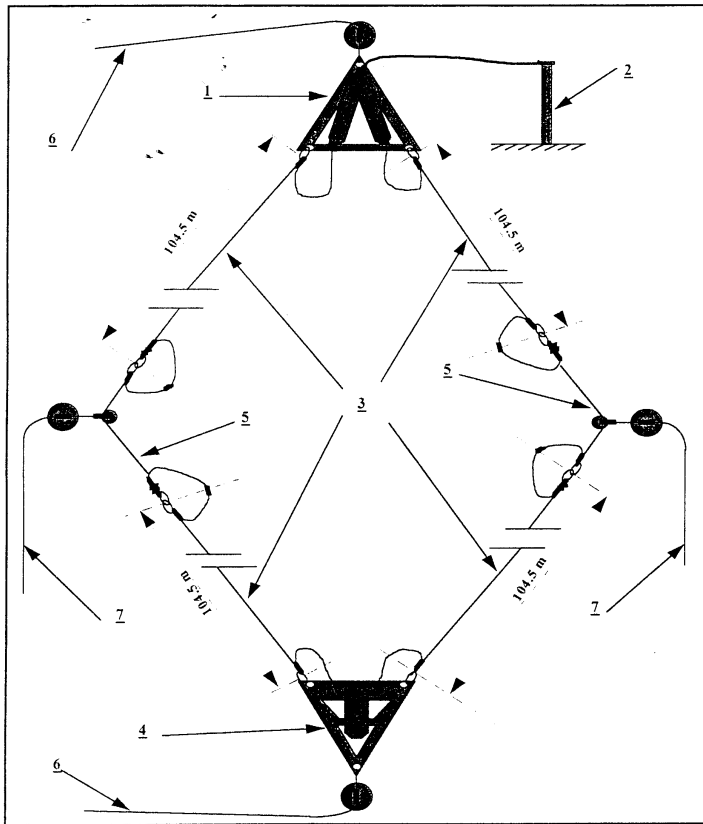
The antenna in rhombic configuration is installed on a surface of the following directions: 220 m in the direction of the transmission, and 100 m in the perpendicular direction. In Sloping Vee configuration, the installation area is 180 m by 100 m.



Manufacturing

The antenna is made of 4 sleeve masts (2 masts of 15 m and 2 masts of 4 m) supporting a rhombic wire antenna fed by a wideband transformer and loaded by a terminal resistance.

Sleeve mast sections are manufactured with Fibreglass Reinforced Plastic composite material. This dielectric material does not disturb the antenna radiations.

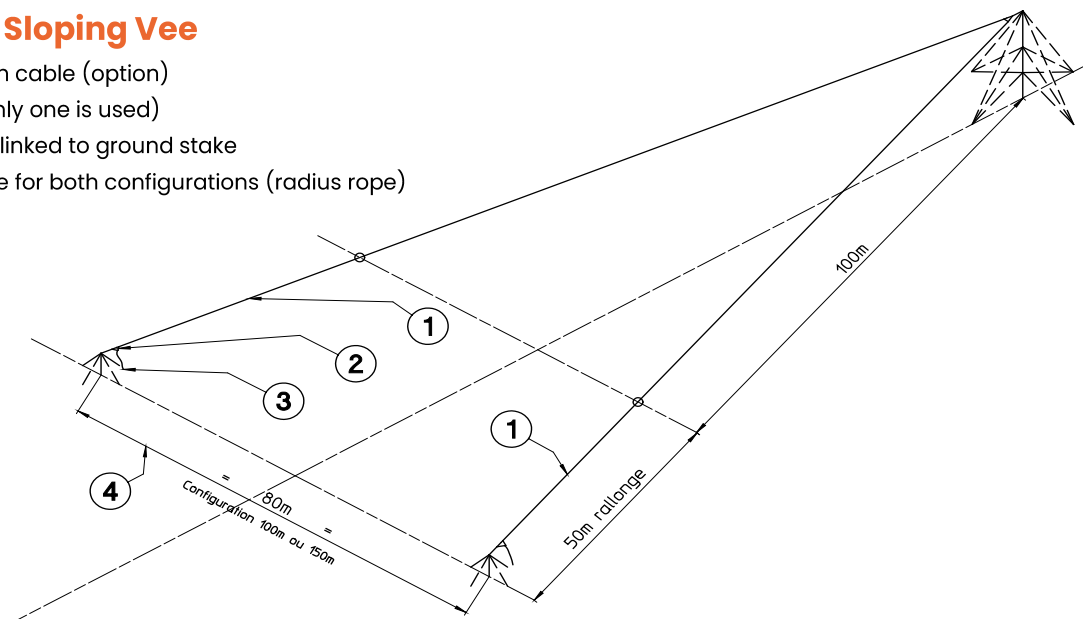


Mounting in Rhombic Shape

1. Resistances
2. Ground stake
3. Antenna wire (105 m length)
4. Transformer
5. Intermediate cable, 4 m length
6. Longitudinal tightening guy cable
7. Lateral tightening guy cable

Mounting in Sloping Vee

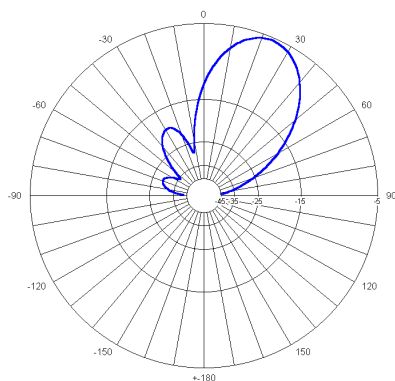
1. 50 m extension cable (option)
2. Resistance (only one is used)
3. Ground cable linked to ground stake
4. Same Distance for both configurations (radius rope)



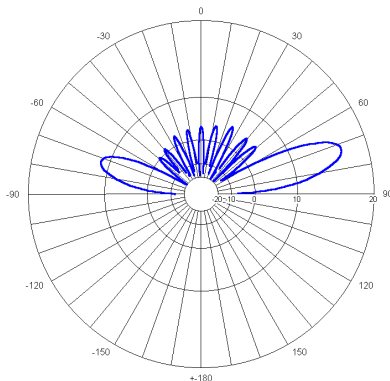
Electrical Specifications

Frequency Range	2 to 30 MHz
VSWR	< 2 at transformer entry < 1.5 to 2 MHz
Radiating Diagrams, V Plan	See graphs below
Permissible Power	1 kW

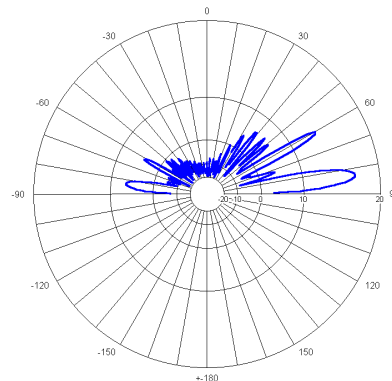
Rhombic Antenna



2 MHz

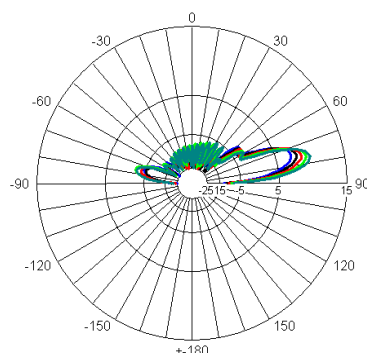


14 MHz



30 MHz

Sloping Vee Antenna



11-13 MHz (with extensions)

Mechanical Specifications

Weight	< 340 kg
Number of Bags*	9
Total Volume*	< 2 m ³
Maximum Weight of a Bag*	< 44 kg
Maximum Length of a Bag*	1.5 m
Installation Time	
<ul style="list-style-type: none"> In Rhombic Configuration In Sloping Vee Configuration 	3 hours at 3 persons 2 hours at 2 persons
Colour	Army green

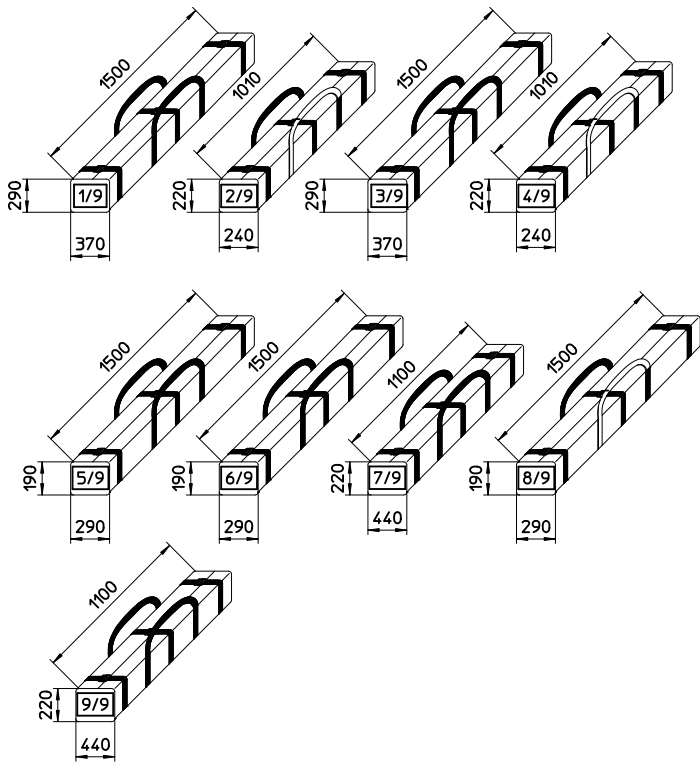
* See details in packaging §.

Environmental Specifications (according to GAM-EG-13 and MIL-STD-810)

Temperature Range	
• Storage	-40°C to +70°C
• Operation	-40°C to +70°C
Wind Resistance	120 km/h on ground type 5 (MIL-STD-619-B)

Packaging

The Rhombic antenna, with Sloping Vee kit, is made of 9 transport bags as described below:



Weight details:	
• Bag n°1	38 kg
• Bag n°2	41 kg
• Bag n°3	38 kg
• Bag n°4	41 kg
• Bag n°5	42 kg
• Bag n°6	42 kg
• Bag n°7	33 kg
• Bag n°8	35 kg
• Bag n°9	18 kg
	387 kg

Installation

Masts are assembled on the ground and tilted to vertical by using a deployment kit (see picture below). The antenna is then lifted to the top of the mast like a flag.



Tilting of a 15 m mast

September 2018

All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



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