VHF Double Dipole TV Transmitting Antenna

FYY-A2OV

Product Manual

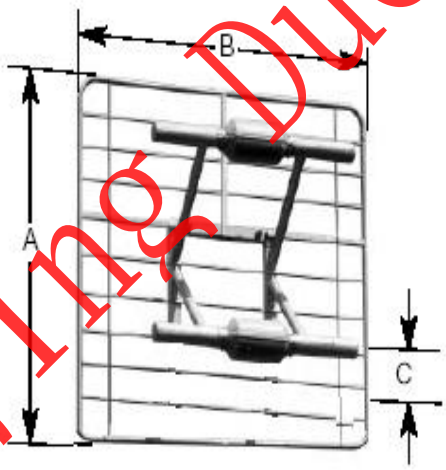
1. Overview

1. 1 Product Function

The VHF Double Dipole Television Antenna (FYY-A2OV) is a product that radiates electromagnetic signals in the VHF (frequency range: 167-223MHz or 6-12CH) band into space. It can be used to transmit VHF band wireless television digital signals and analog signals. The antenna adopts a half wave oscillator design, and the reflector plays a role in directing the electromagnetic wave signal for transmission.

1. 2 Product Structure

The VHF band double dipole antenna is one of the commonly used antenna forms in the VHF band. The antenna adopts an unbalanced coaxial feeding method and does not require a balancer. The antenna has the characteristics of beautiful appearance, good sealing, and high gain. Its structure and product are shown in the following figure：

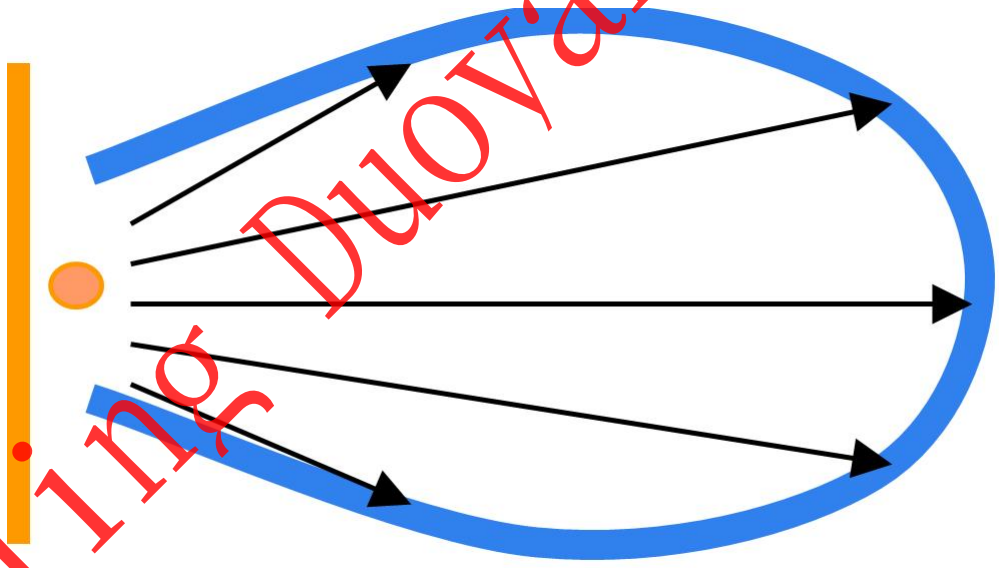


A=1400mm

B=1300mm

C=450mm

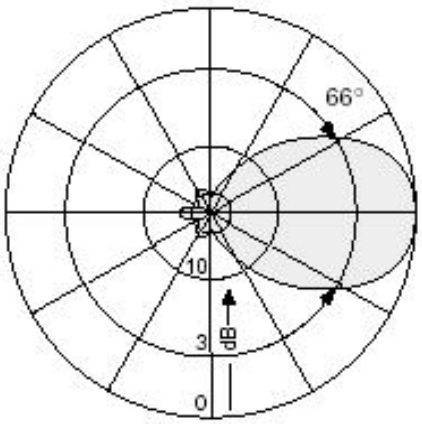
2 Product Principle Diagram



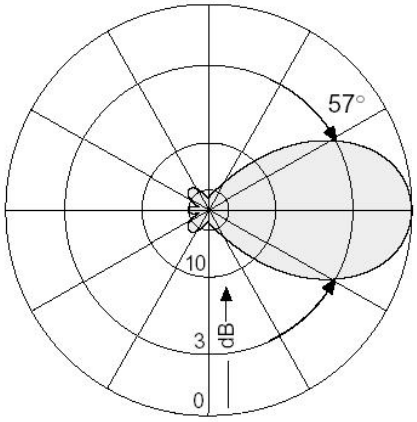
3 Technical Parameters

3.1 Technical Parameters of Unit

No.	Content	Parameter
1	Model	FYY-A20V
2	Output power	3kw
3	Bandwidth	56MHz
4	VSWR	≤1.10
5	Gain	8dBd
6	Lobe width	θ_V:57° θ_H:66°
7	Input power	2.5kw
8	Input interface	IP45;L36; L29; L27
9	Dimension	1300×1400×450mm
10	Weight	25kg
11	Wind resistance	12 level
12	Materials	The dipole is made of stainless steel, the inner conductor is silver plated copper, and the reflector is made of stainless steel.
13	Lightning protection method	DC Ground



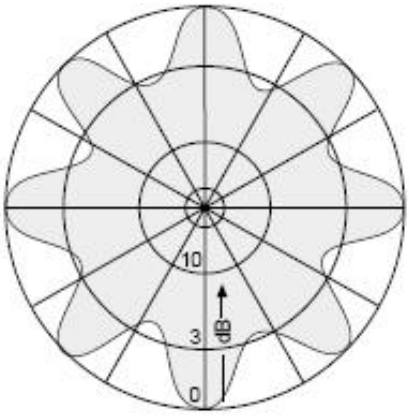
Horizontal directional diagram



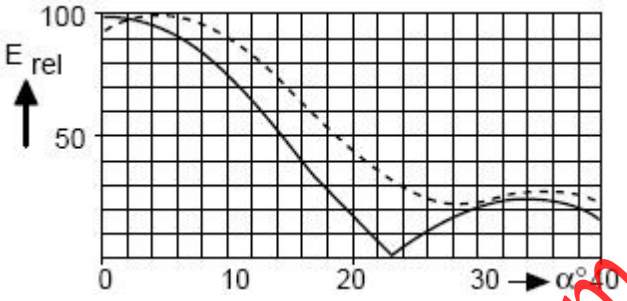
Vertical direction diagram

3.2 2-Layer 4-sided Technical Parameters

No.	Content	Parameters
1	Model	FYY-A20V-8
2	Power	Max 20kw
3	Bandwidth	5GMHz
4	Horizontal field type non circularity	≤±3dB
5	VSWR	≤1.08
6	Gain	5dBd
7	Beam under the sky	0.8°
8	First zero point filling	＞10%
9	Input interface	Matching with the feed tube
10	Weight	180kg
11	Wind resistance	12 Level
12	Color	Red+white
13	Lightning protection	DC Ground
14	Downward tilt	Electrical or mechanical



Horizontal directional diagram



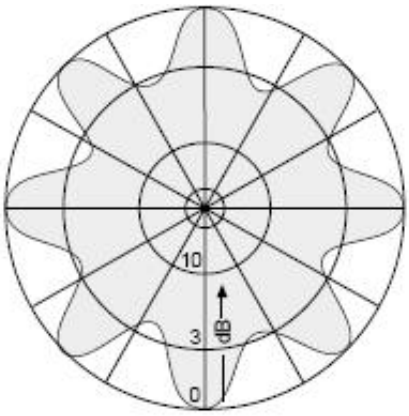
Vertical direction diagram

Power Supply Diagram

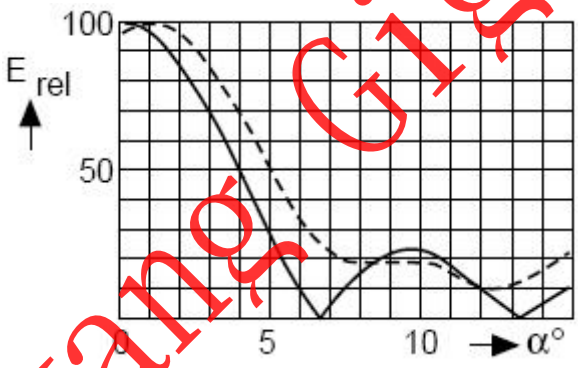
3.3 4-Layer 4-sided Technical Parameters

No.	Content	Parameters
1	Model	FYY-A20V-16
2	Power	Max 40kw
3	Bandwidth	56MHz
4	Horizontal field type non circularity	≤±3dB
5	VSWR	≤1.08
6	Gain	8dBd
7	Beam under the sky	0.8°

8	First zero point filling	＞10%
9	Input interface	Matching with the feed tube
10	Weight	350kg
11	Wind resistance	12 Level
12	Color	Red+white
13	Lightning protection	DC Ground
14	Downward tilt	Electrical or mechanical



Horizontal directional diagram

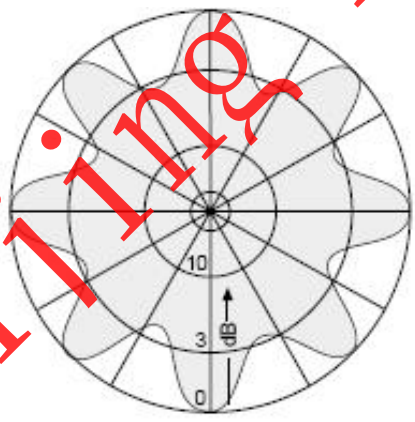


Vertical direction diagram

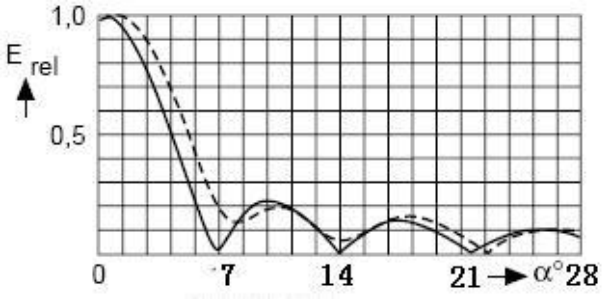
Power Supply Diagram

3.4 6-Layer 4-sided Technical Parameters

No.	Content	Parameters
1	Model	FYY-A20V-24
2	Power	Max 60kw
3	Bandwidth	56MHz
4	Horizontal field type non circularity	≤±3dB
5	VSWR	≤1.08
6	Gain	10.8dBd
7	Beam under the sky	0.8°
8	First zero point filling	＞10%
9	Input interface	Matching with the feed tube
10	Weight	600kg
11	Wind resistance	12 Level
12	Color	Red+white
13	Lightning protection	DC Ground
14	Downward tilt	Electrical or mechanical

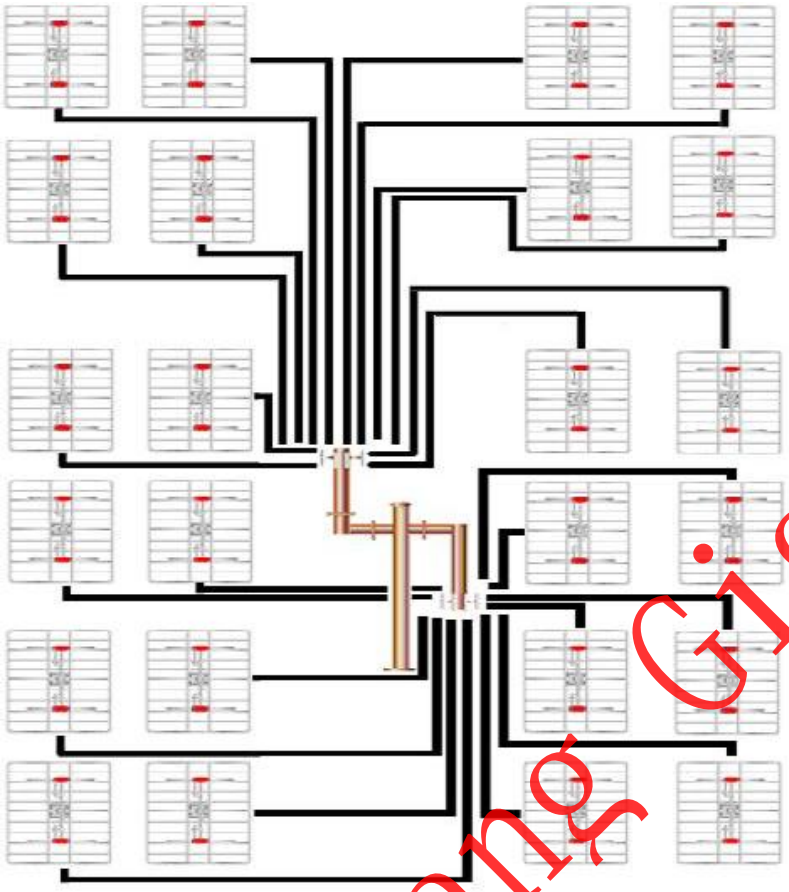


Horizontal directional diagram



Vertical direction diagram

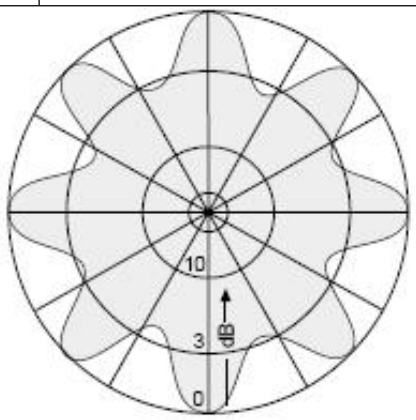
Power Supply Diagram



3.5 8-Layer 4-sided Technical Parameters

No.	Content	Parameters
1	Model	FYY-A20V-32
2	Power	Max 80kw
3	Bandwidth	56MHz
4	Horizontal field type non circularity	≤±3dB
5	VSWR	≤1.08
6	Gain	11dBd
7	Beam under the sky	0.8°
8	First zero point filling	＞10%
9	Input interface	Matching with the feed tube
10	Weight	750kg

11	Wind resistance	12 Level
12	Color	Red+white
13	Lightning protection	DC Ground
14	Downward tilt	Electrical or mechanical



Horizontal directional diagram

Vertical direction diagram

Power Supply Diagram