

## 900 MHz 13 dBi SS Yagi Antenna

The FM51YA1013 High-Performance Yagi Antenna combines high gain with a wide beam-width. They are ideally suited for directional applications in the 900MHz ISM and GSM bands. Typical applications include 900MHz Wireless LAN, SCADA, LPWAN, LoRA, IoT, M2M, and 900 MHz Cellular, Non Line of Sight (NLOS) applications and point to multi-point systems. External interference of this antenna is minimized due to the excellent front to back ratio. These antennas come with a 18" coax lead terminated with an N-Female connector. It can be installed for either vertical or horizontal polarization.

This antenna features a heavy-duty 1/2" stainless steel boom and solid 1/8" elements. Secure mounting is assured by a 1/8" thick plated steel mounting plate and two plated steel U-bolts.

### Configuration

Design	Yagi
Gain	13 to 13 dBi
Polarization	Vertical or Horizontal
Cable Length	18 in [457.2 mm]
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Short

### Electrical Specifications

Description	Min	Typ	Max	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		13		dBi
Front to Back Ratio		18		dB
Input Power			100	Watts

### Specifications by Frequency

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	0.89-0.96					GHz
Gain	13					dBi
Horiz. Beam Width	30					Degrees
Vert. Beam Width	30					Degrees
Max Input Power	100					Watts

### Mechanical Specifications

Radome Material	ABS
<b>Size</b>	
Length	64.1 in [162.81 cm]
Width	6.7 in [170.18 mm]
Height	2 in [50.8 mm]
Mounting Mast Diameter	2 in [50.80 mm]
Weight	1.02 lbs [462.66 g]



### Features:

- 13 dBi gain & all weather, heavy duty steel construction provides superior performance
- Heavy-duty 1/2" stainless steel boom
- Solid Stainless Steel 1/8" elements & 18 inch coax lead
- Can be installed for either vertical or horizontal polarization
- 1/8" thick plated steel mounting plate

### Applications:

- 900MHz ISM Band & GSM Wireless LAN systems
- Point to multipoint & Non Line of Sight (NLOS) applications
- RFID & SCADA
- LPWAN, LoRA, IoT, M2M applications
- 900MHz Cellular

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Environmental Specifications

### Temperature

Operating Range -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

## Plotted and Other Data

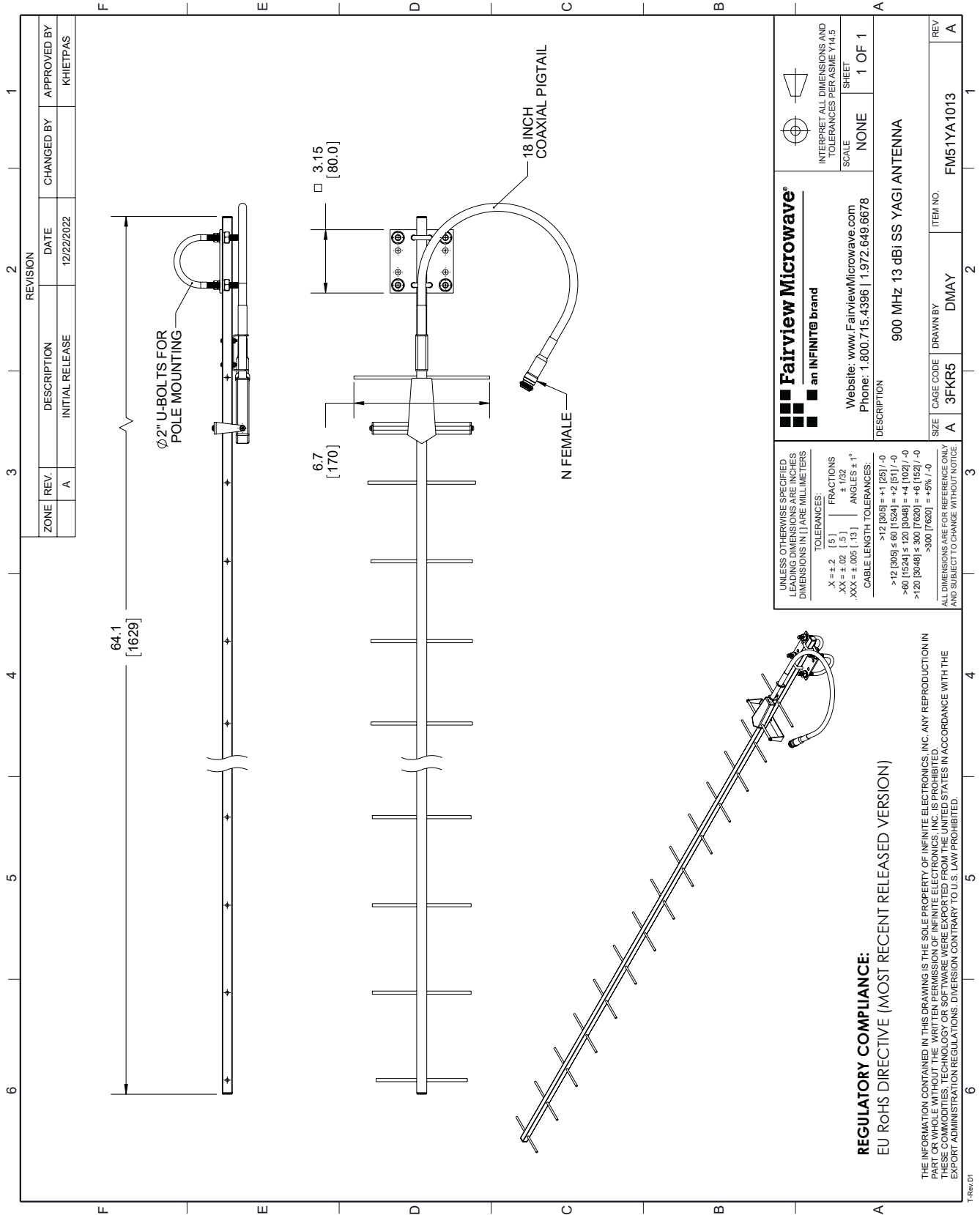
Notes:

900 MHz 13 dBi SS Yagi Antenna from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [900 MHz 13 dBi SS Yagi Antenna FM51YA1013](#)

URL: <https://www.fairviewmicrowave.com/wide-antenna-13-dbi-gain-n-fm51ya1013-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



ZONE	REV.	DESCRIPTION	DATE	APPROVED BY
	A	INITIAL RELEASE	12/22/2022	KHIETPAS

REVISION	CHANGED BY	APPROVED BY

<p>Fairview Microwave<sup>®</sup> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
	<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: 900 MHz 13 dBi SS YAGI ANTENNA</p>	
<p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: DMAY</p> <p>ITEM NO.: FM51YA1013</p>	<p>REV: A</p>

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.

TOLERANCES:

.X = ±.2	[.5]	FRACTIONS
.XX = ±.02	[.5]	±.132
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305]	±.1251 / -0
>12 [305] ≤ 60 [1524]	±.2 [51] / -0
>60 [1524] ≤ 120 [3048]	±.4 [102] / -0
>120 [3048] ≤ 300 [7620]	±.6 [152] / -0
>300 [7620]	±.8 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

**REGULATORY COMPLIANCE:**  
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. EXPORT ADMINISTRATION REGULATIONS: DIVERSION CONTRARY TO U.S. LAW PROHIBITED.