



Shown with panel radome (standard)

### TU BROADBAND (DELTA WING) SERIES

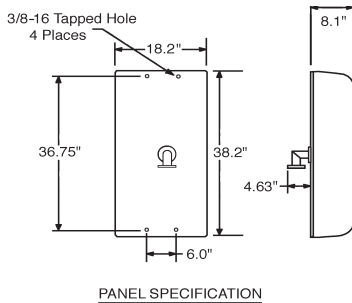
The Dielectric TU Series Panel Antenna consists of an array of panels typically mounted in a four-around configuration and supplied with a support structure for tower-top mounting. The number of panels per layer and the number of layers are variables used to determine the azimuthal and elevation patterns.

The TU Series Panel Antenna has wideband impedance bandwidth and is ideal for multiplexing several UHF channels. Each antenna is fully assembled, and is tested at the factory prior to shipping.

- Wide impedance bandwidth: 470-860 MHz
- Stainless steel panel for maximum reliability and structural stability
- Segmented non-pressurized radome for easy on-tower service
- Available with full cylindrical radome or individual panel radome
- Custom azimuth patterns can be designed to meet specific protection/coverage requirements
- Low ice sensitivity
- Standard configurations of one- to five-around
- Custom beam tilt and null fill available
- Designed for digital and/or analog service
- Available in horizontal, elliptical, or full circular polarization

Custom-designed antennas are available upon request to meet special requirements, such as specific azimuthal pattern, different gains, and custom power input requirements.

### STANDARD DELTA WING



Also available in side-mounted versions.



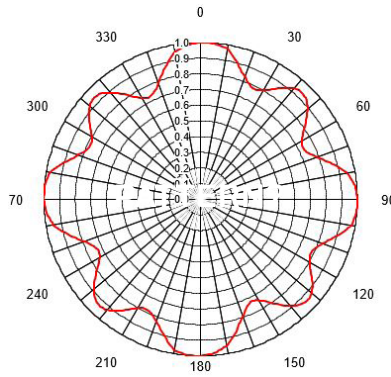
Shown with full radome (optional)

### Single Panel Specifications

Frequency Range	470-860 MHz
VSWR, 470-860 MHz	1.1:1 Max
Impedance	50 ohm
Survival Wind Speed	185 mi/h
Panel Weight	40 lb
Polarization	Horizontal

### Average Power Rating

Channel	Panel Input 7/8"	Connector Size 1 5/8"
14	2.0 kW	6.5 kW
41	1.7 kW	5.6 kW
69	1.5 kW	5.0 kW



**O4** DIRECTIVITY = 1.4

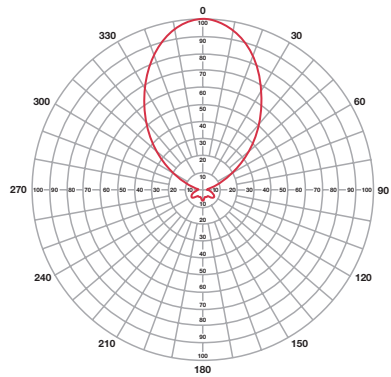
**TU SERIES - DELTAWING**

**Electrical Specifications**

# of Layers	RMS Gain*	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	4.8	6.7	40	6 1/8
4	9.4	13.2	60	6 1/8
6	14.0	19.6	80	7 3/16
8	17.1	23.9	80	7 3/16
10	21.6	30.2	80	7 3/16
12	24.2	33.9	80	7 3/16
14	28.6	40.0	80	7 3/16
16	32.5	45.5	80	7 3/16

**Mechanical Specifications**

Height H <sub>2</sub> (ft)	Moment Arm D <sub>1</sub>	CfAc (ft <sup>2</sup> )	Weight (lb)
8.9	4.5	46	1,400
16.5	8.3	83	2,700
24.1	12.1	120	4,000
31.7	15.9	164	5,400
39.3	19.7	214	6,800
46.9	23.5	267	8,200
54.5	27.3	323	10,000
62.1	31.1	384	11,800



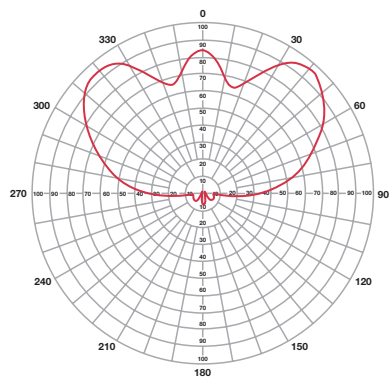
**C1** DIRECTIVITY = 6.0

**Electrical Specifications**

# of Layers	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	28.8	10	3 1/8
4	56.4	20	4 1/16
6	84.0	30	4 1/16
8	102.6	40	6 1/8
10	129.6	50	6 1/8
12	145.2	60	6 1/8
14	171.6	60	6 1/8
16	195.0	60	6 1/8

**Mechanical Specifications**

Height H <sub>2</sub> (ft)	Moment Arm D <sub>1</sub>	CfAc (ft <sup>2</sup> )	Weight (lb)
8.9	4.5	37	1,100
16.5	8.3	66	2,100
24.1	12.1	99	3,100
31.7	15.9	138	4,200
39.3	19.7	180	5,300
46.9	23.5	225	6,400
54.5	27.3	276	7,900
62.1	31.1	331	9,400



**C2** DIRECTIVITY = 3.0

**Electrical Specifications**

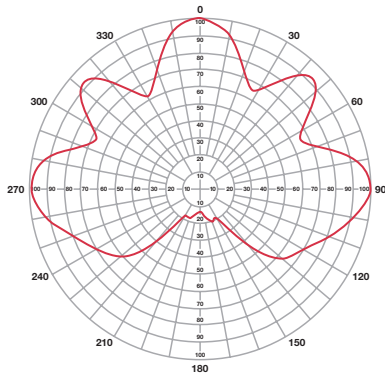
# of Layers	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	14.4	20	4 1/16
4	28.2	40	6 1/8
6	42.0	60	6 1/8
8	51.3	80	7 3/16 EHT**
10	64.8	80	7 3/16 EHT**
12	72.6	80	7 3/16 EHT**
14	85.8	80	7 3/16 EHT**
16	97.5	80	7 3/16 EHT**

**Mechanical Specifications**

Height H <sub>2</sub> (ft)	Moment Arm D <sub>1</sub>	CfAc (ft <sup>2</sup> )	Weight (lb)
8.9	4.5	42	1,200
16.5	8.3	76	2,300
24.1	12.1	111	3,400
31.7	15.9	152	4,600
39.3	19.7	201	5,800
46.9	23.5	246	7,000
54.5	27.3	303	8,600
62.1	31.1	359	10,200

\*At channel 41  
 \*\*Enhanced Heat Transfer (EHT)

**TU SERIES - DELTAWING**



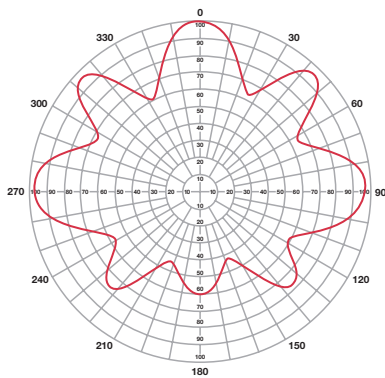
**C3** DIRECTIVITY = 2.0

**Electrical Specifications**

# of Layers	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	9.6	30	4 1/16
4	18.8	60	6 1/8
6	28.0	80	8 3/16
8	34.2	80	7 3/16 EHT**
10	43.2	80	7 3/16 EHT**
12	48.4	80	7 3/16 EHT**
14	57.2	80	7 3/16 EHT**
16	65.0	80	7 3/16 EHT**

**Mechanical Specifications**

Height H <sub>2</sub> (ft)	Moment Arm D <sub>1</sub>	CfAc (ft <sup>2</sup> )	Weight (lb)
8.9	4.5	46	1,300
16.5	8.3	83	2,500
24.1	12.1	120	3,700
31.7	15.9	164	5,000
39.3	19.7	214	6,300
46.9	23.5	267	7,600
54.5	27.3	323	9,300
62.1	31.1	384	11,000



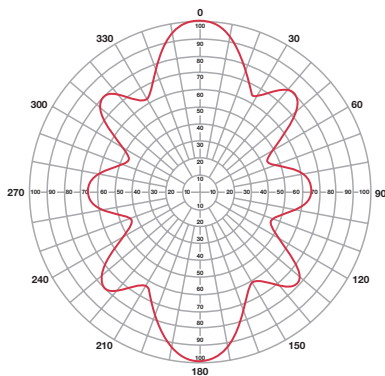
**C4** DIRECTIVITY = 1.7

**Electrical Specifications**

# of Layers	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	8.2	35	6 1/8
4	16.0	60	6 1/8
6	23.8	80	7 3/16 EHT**
8	29.1	80	7 3/16 EHT**
10	36.7	80	7 3/16 EHT**
12	41.1	80	7 3/16 EHT**
14	48.6	80	7 3/16 EHT**
16	55.3	80	7 3/16 EHT**

**Mechanical Specifications**

Height H <sub>2</sub> (ft)	Moment Arm D <sub>1</sub>	CfAc (ft <sup>2</sup> )	Weight (lb)
8.9	4.5	46	1,400
16.5	8.3	83	2,700
24.1	12.1	120	4,000
31.7	15.9	164	5,400
39.3	19.7	214	6,800
46.9	23.5	267	8,200
54.5	27.3	323	10,000
62.1	31.1	384	11,800



**P4** DIRECTIVITY = 2.0

**Electrical Specifications**

# of Layers	Peak Gain*	Max Avg Power (kW)	EIA Input Connector (in)
2	9.6	30	4 1/16
4	18.8	60	6 1/8
6	28.0	80	7 3/16 EHT**
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10	43.4	80	7 3/16 EHT**
12	48.4	80	7 3/16 EHT**
14	57.2	80	7 3/16 EHT**
16	65.0	80	7 3/16 EHT**

**Mechanical Specifications**

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62.1	31.1	384	11,800

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