



TQJ-450DQ-A

## Applications

UHF Band TETRA Communications/ Wireless Data transmission system/ Wireless Paging System

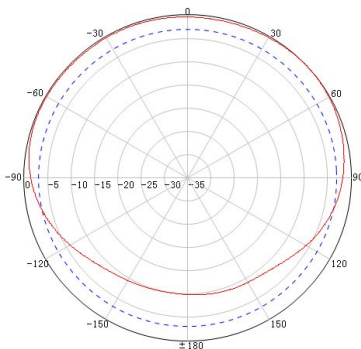
### Electrical Specifications

Frequency Range (MHz)	406~512
Band Width (MHz)	106
Polarization	Vertical
Gain (dBd) (depend on pattern)	6~9
Vertical Beamwidth(°)	16
Impedance (Ω)	50
VSWR	≤1.5
Maximum Input power (W)	300
Lighting protection	DC Ground

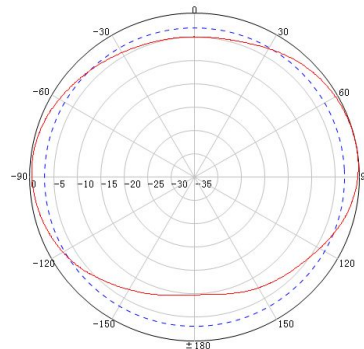
### Mechanical specifications

Connector Type	7/16DIN (F) or N (F)
Connector position	Bottom-end of the cable
Antenna Size (mm)	2610×330
Antenna Weight (kg)	11.5±0.05 (exclude the bracket)
Antenna Colour	Primary Colour
Operating Temperature (°C)	-40~+70
Relative Humidity(%)	5~95
Rated Wind Velocity (m/s)	60
Ingress Protection	IP65
Mounting	Mast mounting (support mast shall be prepared by customer)
Suitable Pole Diameter	φ 50~ φ 60
Mounting Kit	JM-DB

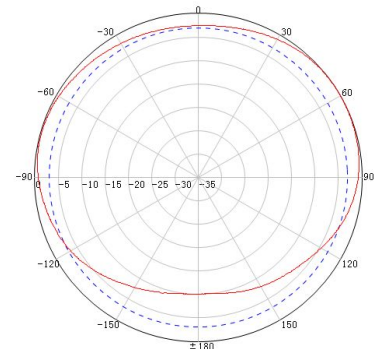
### Typical Pattern



H-plane: Gain 9.1 dBd  
1/4 λ spacing from tower



H-plane: Gain 9.1 dBd  
1/2 λ spacing from tower



H-plane: Gain 8.5 dBd  
3/8 λ spacing from tower

(Adjustable: Offset circular, cardioid, or bidirectional)

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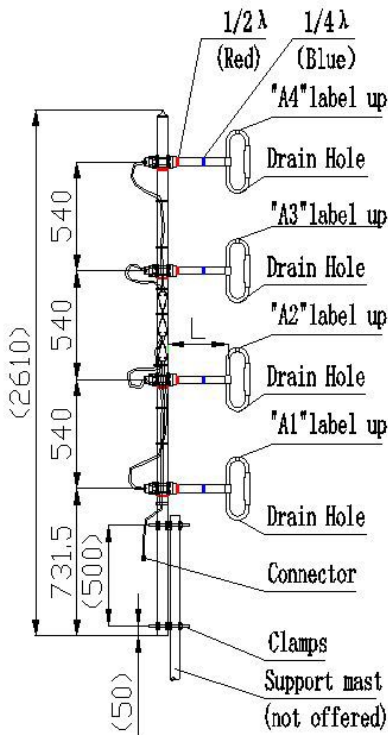


Product Pictures



Installation Sketch

$1/4 \lambda$ , $L=160 \pm 10\text{mm}$	H-plane, GAIN: 9.1dBd
$3/8 \lambda$ , $L=245 \pm 10\text{mm}$	H-plane, GAIN: 8.5dBd
$1/2 \lambda$ , $L=290 \pm 10\text{mm}$ (Spacing from Tower)	H-plane, GAIN: 9.1dBd



**Step 1: Mount the radiating element to supporting bar**

**Step 2: Fasten the clamp to secure supporting bar to main pole**

While mounting, please notice that the clamps should be set here by the edge of the indicator ( $1/4\lambda$  or  $1/2\lambda$ ) on the bar according to the wavelength.

**Step 3: Mount the antenna main pole to the support mast**

While mounting, please notice that the clamps should be set here by the edge of the indicator on the main pole.