

UHF Directional Yagi Antennas

400-600 MHz

YB6 Series



The YB Series are high gain yagi antennas which will provide excellent point to point communication in RF control, short or long haul link and other applications calling for highly directional antennas. YB Series antennas exhibit narrow beamwidths and high front to back ratios to help minimise potential interference to and from other systems.

The feed element of each antenna is of full folded dipole construction thus offering maximum bandwidth and reliability. The dipole element is welded to the boom to ensure low intermodulation performance and maximum durability. The passive elements are through mounted to the circular boom section and welded at each side to further minimise the potential for both corrosion and generation of intermodulation products.

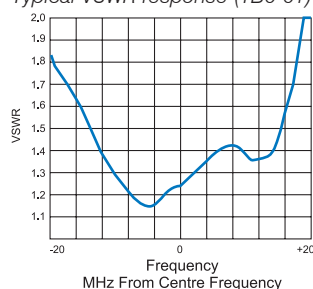
For extreme climatic or corrosive applications, the stainless steel YBSS Series or black ruggedised RDA Series yagis should be considered.



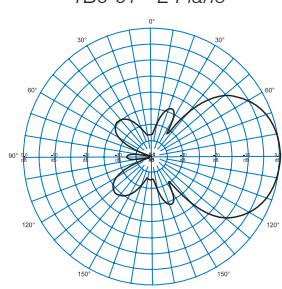
Features:

- All welded construction for maximum and reliable performance
- Narrow beamwidths & high front to back ratios effective in reducing interference
- Alodine finish provides an excellent conductive surface for earthing
- Can be configured in stacks or bays for higher gain applications using PH and PHE series phasing harnesses
- DC grounding on all elements for the ultimate in lightning protection and dissipation of static noise

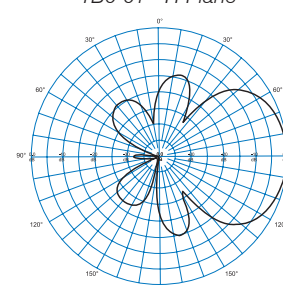
Typical VSWR response (YB6-61)



YB6-61 - E Plane



YB6-61 - H Plane



Electrical

| Model Number | YB6-65 | YB6-61 | YB6-62 | YB6-75 | YB6-99 |
|--|----------------|-----------|-----------|-----------|-----------|
| Nominal Gain <i>dBi</i> (<i>dBd</i>) | 11 (9) | | | | |
| Frequency <i>MHz</i> | 400 - 420 | 450 - 480 | 480 - 520 | 580 - 600 | 350 - 600 |
| Tuned Bandwidth | Full band | | | | 5% |
| VSWR (Return Loss) | <1.5 :1 (14dB) | | | | |
| Nominal Impedance Ω | 50 | | | | |
| Vertical Beamwidth $^\circ$ | 47 | | | | |
| Horizontal Beamwidth $^\circ$ | 56 | | | | |
| Front / Back Ratio <i>dB</i> | 18 (Typical) | | | | |
| Input Power <i>W</i> | 100 | | | | |

Mechanical

| Model Number | YB6-65 | YB6-61 | YB6-62 | YB6-75 | YB6-99 | |
|---------------------------------------|---|--------|--------|--------|--------|------|
| Construction | All welded aluminium with alodined finish | | | | | |
| Length <i>m</i> | 0.9 | 1.0 | 0.8 | 0.8 | 1.3 | |
| Weight <i>kg</i> | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | |
| Termination | N female with short 9008 cable tail | | | | | |
| Mounting Area | 100mm x 25mm diam. alodined aluminium | | | | | |
| Suggested Clamps | 1 X UNV | | | | | |
| Projected Area <i>cm</i> ² | No ice | 485 | 477 | 394 | 349 | 600 |
| | With ice | 1169 | 1099 | 967 | 857 | 1367 |
| Wind Load (Thrust) @ 160km/h <i>N</i> | 57 | 56 | 47 | 41 | 71 | |
| Wind Gust Rating <i>km/h</i> | >240 | | | | | |
| Torque @160 km/h <i>Nm</i> | 22 | 24 | 16 | 13 | 42 | |