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# FM/DAB RADIO BROADCAST



ZCG's range of radio broadcast antennas include sidemount dipoles, digital audio broadcast (DAB) high power dipoles and mixed polarised dipoles for all your radio broadcasting requirements.

- **Sidemount dipoles** are an ideal choice for use as an FM radio broadcast antenna. They are of reliable construction, cover a broad bandwidth and permit single antenna sharing with multiple FM transmit frequencies. ZCG's range of **B46** FM radio sidemount dipoles is listed below.
- **Mixed polarised dipoles** are an excellent choice for single FM radio station local area coverage. Community broadcast groups with a limited budget will find these an affordable and effective option.
- **Digital audio broadcast (DAB) high power dipoles** including the **DAB-VD** model listed below have been specifically developed to be used in a pressurised system.
- All of our broadcast products come with a 2 year warranty.
- Filters and multicouplers, mounting hardware, coaxial feeder cable and connectors are all available separately.

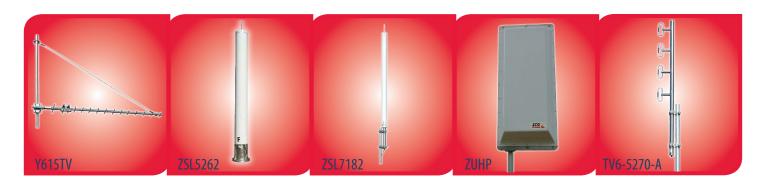
## FM RADIO SIDEMOUNT DIPOLES DAB HIGH POWER DIPOLES

| Specifications  | B46B   | B46BSS         | B46BHPSS                             | DAB-VD-716                                   | DAB-VD-78           |  |  |  |
|-----------------|--|----------------|--------------------------------------|--|---------------------|--|--|--|
| Construction    | Aluminium                                      |                | 304 Stainless Steel                  |  |                     |  |  |  |
| Frequency Range |  | FM 87.5-108MHz | FM 87.5-108MHz DAB+ Radio 174-230MHz |  |                     |  |  |  |
| Bandwidth       | Full frequency                                 | y range stated | 10MHz - specify                      | 50MHz - specify when ordering                |                     |  |  |  |
| VSWR            | Better th                                      | an -17 dB      | Better than -20 dB                   | Better than 1.2:1 across specified bandwidth |                     |  |  |  |
| Gain            | 0 dB for a single bay, stacking increases gain |                |                                      |  |                     |  |  |  |
| Connector       | N-type female                                  |                | 7/16" DIN female                     | 7/16" DIN female 7/8" EIA flang              |                     |  |  |  |
| Maximum Power   | 500 Watts per bay                              |                | 2 Kilowatts per bay                  | 2 Kilowatts per bay                          | 5 Kilowatts per bay |  |  |  |

## MIXED POLARISED DIPOLES CIRCULAR POLARISED FM RADIO DIPOLES

| Specifications  | FMD-CPLP                | FMD-CPHP                                     | FMCPX-78                              | FMCPX-716        | FMCPX-N       |  |  |
|-----------------|-------------------------|--|---------------------------------------|------------------|---------------|--|--|
| Construction    |                         | Fully-welded 304 stainless steel             |                                       |                  |               |  |  |
| Frequency Range |                         | FM 87.5-108MHz                               |                                       |                  |               |  |  |
| Bandwidth       | 500kHz/single FM broad  | dcast frequency - specify                    | A = 87.5-96MHz $B = 93.5-1$           | Specify 5MHz     |               |  |  |
| VSWR            |                         | Better than 1.2:1 across specified bandwidth |                                       |                  |               |  |  |
| Gain            | -3 dB for a single bay, | stacking increases gain                      | 0 dB per bay, stacking increases gain |                  |               |  |  |
| Connector       | N-type female           | 7/16" DIN female                             | 7/8" EIA flanged                      | 7/16" DIN female | N-type female |  |  |
| Maximum Power   | 500 Watts per bay       | 1 Kilowatt per bay                           | 5 Kilowatts                           | 2 Kilowatts      | 500 Watts     |  |  |

# TV BROADCAST



ZCG's range of TV broadcast antennas include dual dipole yagis, horizontal UHF TV slot antennas and to meet your exacting TV broadcasting needs.

- The Y600-TV series of dual dipole yagis are designed and manufactured to deliver genuine broadband coverage of the UHF TV Band IV and V.
- Featuring a horizontal radiation pattern and high gain, the **ZSL-series of slot antennas** are designed for UHF TV broadcast.
- The **ZUHP horizontal polarised broadband panel** covers the entire UHF TV band IV and V.
- The **TV6-5282** series of **UHF TV 4-stack dipole arrays** are designed and manufactured for wide-band vertically polarised TV transmission where high gain is required.
- All of our broadcast products come with a 2 year warranty.
- Filters and multicouplers, mounting hardware, coaxial feeder cable, connectors are all available separately.

## **UHF TV DUAL DIPOLE YAGI**

## **HORIZONTAL UHF TV SLOT**

| Specifications     | Y615TV   | ZSL5262       | ZSL5262-MP                                  | ZSL5262-HP       | ZSL6172       | ZSL6172-MP       | ZSL6172-HP       |  |
|--------------------|--|---------------|---|------------------|---------------|------------------|------------------|--|
| Construction       | Aluminium/Stainless<br>Steel                     |               | White radome, aluminium mount tube          |                  |               |                  |                  |  |
| Frequency<br>Range | UHF TV band IV<br>and V<br>520-700MHz            | 5             | 520-620MHz (Ch 27-40) 610-700MHz (Ch 40-52) |                  |               |                  | )                |  |
| Bandwidth          | 15 consecutive<br>channels (105MHz)<br>(specify) |               | Full frequency range stated                 |                  |               |                  |                  |  |
| VSWR               | <1.2:1 across specified bandwidth                |               | Better than 1.2:1 across the channel range  |                  |               |                  |                  |  |
| Gain               | 12.1 dBd   | 9.5 dBd       |   |                  |               |                  |                  |  |
| Connector          | N-type female                                    | N-type female | 7/16" DIN female                            | 7/8" EIA flanged | N-type female | 7/16" DIN female | 7/8" EIA flanged |  |
| Maximum Power      | 50 Watts   | 200 Watts     | 2 Kilowatts                                 | 3 Kilowatts      | 200 Watts     | 2 Kilowatts      | 3 Kilowatts      |  |

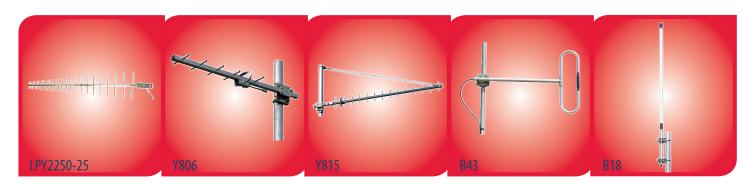
## **HORIZONTAL UHF TV SLOT**

#### HORIZONTAL POLARISED UHF TV PANEL

## **UHF TV DIPOLE 4-STACK ARRAY**

|                    | • · · · · · · · · · · · · · · · · · · ·                       |                  |                  |  |   |                          |  |
|--------------------|---|------------------|------------------|--|---|--------------------------|--|
| Specifications     | ZSL7182   | ZSL7182-MP       | ZSL7182-HP       | ZUHP   | TV6-5270-A  | TV6-5270-B               |  |
| Construction       | White radome, aluminium mount tube White radome, flange mount |                  |                  | White radome, aluminium back screen                    | 304 stainless steel                               |                          |  |
| Frequency<br>Range | 708-820MHz (Ch 54-69)   |                  |                  | UHF TV band IV and V 520-700MHz<br>(Channel 27-69)     | 520-650MHz<br>(Ch 27-43)                          | 590-700MHz<br>(Ch 38-54) |  |
| Bandwidth          | Full frequency range stated                                   |                  |                  |  |   |                          |  |
| VSWR               | Better than 1.2:1 across the channel range                    |                  |                  |  |   |                          |  |
| Gain               | 9.5 dBd   |                  |                  | 11 dBd   | 7.5 dBd   |                          |  |
| Connector          | N-type female   | 7/16" DIN female | 7/8" EIA flanged | N-type female  | N-type female N-type female in base of moun cable |                          |  |
| Maximum Power      | 200 Watts   | 2 Kilowatts      | 3 Kilowatts      | 250 Watts per bay - higher power<br>versions available | 250 Watts - for 500 Watts add -MP whe<br>ordering |                          |  |

# **BASE STATION**



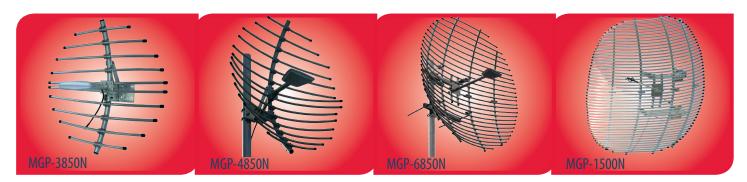
ZCG's comprehensive range of Base Station Antennas is built to full commercial standard using only the finest quality components. There are antenna models designed for numerous RF applications across the Airband, VHF and UHF communication frequencies.

- For applications requiring genuine broadband coverage the **LPY2250 and LPY2250-25 log periodic yagis** provide exceptionally broad bandwidth coverage across their full frequency ranges.
- The **CM range of mast mount models** offer maximum gain and reception range in an omni-directional, mobile phone base station antenna.
- The **Y800 series of base station Yagis** can be manufactured to cover any 60MHz you require within the frequency range 700 to 960MHz or select from our set frequency range.
- The **DUA4052 binary dipole arrays** offer both an omni-directional radiation pattern and genuine broadband coverage across the entire UHF frequency range. The array is ideally suited for multiple frequency transmissions at highly populated radio sites.
- For Airband, VHF and UHF communications, the **B42/43/44 range of sidemount dipole base station antennas** deliver good gain and are factory-tuned to cover an entire band at less than 1.5:1 VSWR.
- **The B14 and B18 omni-directional coaxial dipoles** are for use in the 118 to 137MHz Airband frequency range. Specify any 3% bandwidth you require and your dipole will be manufactured and tuned accordingly at better than 1.5:1 VSWR.
- Filters and multicouplers, mounting hardware, coaxial feeder cable and connectors are all available separately.

|                              | LOG PERIODIC YAGIS          |  | MAX GAIN MAST MOUNT                    |                      | Squai   | e and round boor  | n Yagis         |        |
|------------------------------|-----------------------------|--|--|----------------------|---|---|-----------------|--------|
| Specifications               | LPY2250                     | LPY2250-25   | CM1600AM-4GX                           | CM1600AM             | CMG1600AM   | Y806  | Y809            | Y815   |
| Construction Stainless steel |                             | White fibreglass radome, stainless steel mount section |  |                      | Aluminium, or add SS for 304 stainless steel<br>Also available in round boom - add -R |   |                 |        |
| Frequency<br>Range           | 850-2250MHz                 | 650-2250MHz  | 4G LTE 700-<br>788MHz                  | 4G/3G 825-<br>890MHz | 4G/3G 890-<br>960MHz  | 700-960MHz  |                 |        |
| Bandwidth                    | Full frequency              | range stated   | Full fre                               | equency range sta    | ated  | Specify any 60MHz or transmit and receive when ordering |                 |        |
| VSWR                         | Less than 2:1 across        | full frequency range                                   |  | <1.5:1               |   | Better than 1.5:1 across specified bandwidth            |                 |        |
| Gain                         | 8 dBi                       | 10.2 dBi   |  | 8.1 dBi              |   | 9 dBd   | 11.5 dBd        | 14 dBd |
| Connector                    | BNC female - ot<br>please : |  | N-type female in base of mount section |                      | N-type female in base of mount section N-type female fitted to 250mm R                |   | RG59 cable tail |        |
| Maximum Power                | 250 V                       | Vatts  |  | 20 Watts             |   |   | 50 Watts        |        |

|                    | UHF BINARY  | BINARY DIPOLE ARRAY SIDEMOUNT DIPOLES |  | AIRBAND COAXIAL DIPOLES     |                    |   |   |
|--------------------|---|---------------------------------------|--|-----------------------------|--------------------|---|---|
| Specifications     | DUA4052AL   | DUA4052SS                             | B42  | B43                         | B44                | B14   | B18   |
| Construction       | Aluminium   | 304 stainless steel                   | Aluminium, or add SS for 304 stainless steel |                             |                    | White radome,<br>aluminium mount<br>section | White radome,<br>stainless steel<br>mount section |
| Frequency<br>Range | UHF 400   | -520MHz                               | Airband<br>118-137MHz                        | VHF high band<br>148-174MHz | Airband 118-137MHz |   |   |
| Bandwidth          | Full frequency range stated                           |                                       |  |                             |                    | Specify any 3% or to<br>when o              | ransmit and receive<br>rdering                    |
| VSWR               |   |                                       | Bette  | r than 1.5:1 across full    | band               |   |   |
| Gain               | 3 dBd 0 dBd for a single bay, stacking increases gain |                                       |  |                             |                    | 0 d   | Bd  |
| Connector          | N-type female fitted to external cable                |                                       |  |                             |                    | N-type female in ba                         | se of mount section                               |
| Maximum Power      | 500 Watts 250 Watts                                   |                                       |  |                             | 100 V              | Vatts                                       |   |

# **STL LINK**



ZCG's range of STL link gridpack antennas are available in a wide range of frequency bands to suit all requirements and allocations.

- Smaller 900mm or 1.2metre diameter STL links consist of multi-pieces for a flat-pack design
- Larger 1.8 metre diameter STL link constructured of a 2-piece rear screen design for ease of assembly.
- The 820-960MHz STL link are full frequency range, but centred for STL link 850MHz designed for wireless data applications in the ISM 2.4 range.
- Coaxial feeder cable, water-proofing, bird proofing and other installation accessories are all available separately.

|                     | 3' or 0.9 metre   | 4' or 1.2 metres 6' or 1.8 i                     |                   | metres                   |  |  |
|---------------------|---|--|-------------------|--------------------------|--|--|
| Specifications      | MGP-3850N   | MGP-4850N  | MGP-6850N         | MGP-1500N                |  |  |
| Construction        | Multi-piece corrosion resistant aluminium and launcher unit 2-piece aluminium rea |  |                   | screen and launcher unit |  |  |
| Frequency Range     |   | 1.4-1.55GHz                                      |                   |                          |  |  |
| Bandwidth           | Full fre  | Full frequency range stated - centred for 850MHz |                   |                          |  |  |
| VSWR                |   | <1.5:1 full freque                               | ency range stated |                          |  |  |
| Gain                | 15.4 dBi  | 18.5 dBi   | 22.2 dBi          | 26.3 dBi                 |  |  |
| Beamwidth - maximum | 25.3° 20° 12°   |  | 12°               | 10°                      |  |  |
| Connector           | N-type female   | ear of launcher unit                             |                   |                          |  |  |
| Maximum Power       | 100 Watts   |  |                   |                          |  |  |

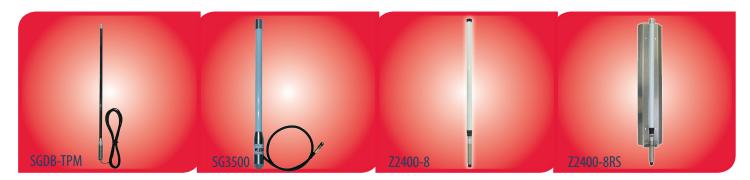
4' or 1.4 metres 6' or 1.8 metres

|                     | 1 01 11   | · · · · · · · · · · · · · · · · · · · | o or no menes                                   |            |  |
|---------------------|---|---------------------------------------|---|------------|--|
| Specifications      | MGP-4650N   | MGP-4750N                             | MGP-6400N-PIM                                   | MGP-6750N  |  |
| Construction        | Multi-piece corrosion resistan                                      | t aluminium and launcher unit         | 2-piece aluminium rear screen and launcher unit |            |  |
| Frequency Range     | 570-670MHz  | 700-820MHz                            | 500-520MHz                                      | 700-800MHz |  |
| Bandwidth           |   | Full frequency                        | range stated                                    |            |  |
| VSWR                |   | <1.5:1 full freque                    | ency range stated                               |            |  |
| Gain                | 15.4 dBi  | 18.5 dBi                              | 22.2 dBi  | 26.3 dBi   |  |
| Beamwidth - maximum | 23°   | 22°                                   | 24°   | 12°        |  |
| Connector           | N-type female fitted to cable N-type female in rear of launcher uni |                                       |   |            |  |
| Maximum Power       | 100 Watts   |                                       |   |            |  |

8' or 2.4 metres 6' or 1.8 metres

| Specifications      | MGP-8700N                                       | MGP-6800N  | MGP-6600N  | MGP-1721N   |  |  |  |
|---------------------|---|------------|------------|-------------|--|--|--|
| Construction        | 2-piece aluminium rear screen and launcher unit |            |            |             |  |  |  |
| Frequency Range     | 700MHz  | 800-820MHz | 520-700MHz | 1.71-2.1GHz |  |  |  |
| Bandwidth           | Full frequency range stated                     |            |            |             |  |  |  |
| VSWR                | <1.5:1 full frequency range stated              |            |            |             |  |  |  |
| Gain                | 18.1 dBi  | 22.2 dBi   | 19 dBi     | 22.2 dBi    |  |  |  |
| Beamwidth - maximum | 18.75°  | 12°        | 20°        | 12°         |  |  |  |
| Connector           | N-type female in rear of launcher unit          |            |            |             |  |  |  |
| Maximum Power       |   | 100 \      | Watts      |             |  |  |  |

# **WIRELESS DATA**



ZCG's range of wireless data antennas include multiband, omidirectional, stud and mast mount antennas to suit all of your wireless data applications.

- For wireless data applications anywhere across the 4G and 3G mobile phone frequency range 825 to 960 MHz and 1710 to 2190 MHz, our popular **SGDB-TPM multiband antenna top** with 6.2 dBi gain offers an effective solution.
- The ground independent C-band 5G SG3500 omni-directional wireless data collinear is specifically designed for 3.4-3.6GHz frequency range.
- The **Z2400-8 range are omni-directional stud or mast mount collinears** designed for wireless data applications in the ISM 2.4 range.
- The rear reflector screen fitted to the Z2400-8RS model restricts the radiation pattern emitted at the rear of the antenna.
- Coaxial feeder cable, water-proofing, bird proofing and other installation accessories are all available separately.

|                 | Multiband 4G LTE/4G                | 5G thread mount collinear                              | ISM 2.4 COLLINEAR<br>MAST MOUNT                   | ISM 2.4 COLLINEAR<br>WITH REAR SCREEN  |  |  |
|-----------------|------------------------------------|--|---|--|--|--|
| Specifications  | SGLWB                              | SG3500   | Z2400-8   | Z2400-8RS  |  |  |
| Construction    | Black or White fibreglass rac      | Black or White fibreglass radome and aluminium ferrule |   | White fibreglass radome, 304 stainless steel mount section and aluminium rear reflector screen |  |  |
| Frequency Range | Multiband 4G LTE and 4G/3G         | C-Band 5G 3.4-3.6GHz                                   | ISM 2.4-2.5GHz                                    |  |  |  |
| Bandwidth       |                                    | Full frequency   | y range stated                                    |  |  |  |
| VSWR            | <2.5:1 across full frequency range | <1.8:1 across full frequency range                     | <1.5:1 full freque                                | ency range stated  |  |  |
| Gain            | 2.1 dBi                            | 6 dBi  | 10 dBi  | 13 dBi - with screen fitted  |  |  |
| Connector       | FME female fitted to 4.7m cable    | SMA male fitted to 500mm cable                         | N-type female in base of mount section - no cable |  |  |  |
| Maximum Power   | 10 Watts                           | 20 Watts   | 50 Watts  | 50 Watts   |  |  |

# **ACCESSORIES**

ZCG stocks a range of accessories including filters and multicoupling, cable, connectors, power dividers, adapters, lightning protection and mounting hardware to make your antenna installation as efficient as possible.



ZCG is an Australian family-owned business operating since 1970. We manufacture hundreds of antenna models to suit your RF communication and broadcasting requirements. The design and development of new products is always an ongoing process for our in-house Research and Development department.

Our product range includes Base station, radio and TV broadcast, filters and multicoupling, vehicle mounted mobile phone, CB radio, VHF, marine, wireless data and hand portable antennas.

In the majority of cases ZCG will have an antenna designed to serve your purposes. If not, you are welcome to enquire and we will consider special designs to meet your specific requirements.

Because we design and assemble our antennas in-house, quality control is monitored at every step of the process. We provide exceptional quality, superior performance, prompt delivery and meaningful customer service relationships.

We take pride in every product we design and manufacture. Our reputation has been built upon these high standards.