

# Cellular Antenna Systems

## 1700 - 2200 MHz

The DrawCom range of Cellular base-station antenna systems in the 1710-2200 MHz bands include;

- Panel antennas - Vertical and dual polarisation
- Yagi antennas - Single and dual-band
- Omni Antennas
- Twin array antennas
- Tri-Sector antennas
- Remote tilt systems

In this catalogue we detail the dual-pole antennas. Please contact us for single-pole panel information.



# Cellular Antenna Systems

## 1700 - 2200 MHz

### Single Band Panel Antennas

| Part No.      | Band(s) (MHz) | Description                                       | Polarity | Nominal Gain (dBi) | Nominal Horizontal Beam Width (deg) | Nominal Vertical Beam Width (deg) | Tilt (deg) | Length (mm) | No. and location of 7/16 DIN Skt Connectors |
|---------------|---------------|---|----------|--------------------|-------------------------------------|-----------------------------------|------------|-------------|---|
| PCNV065-13-x  | 1710-1880     | Panel Antenna, FET                                | X        | 18                 | 65                                  | 7.0                               | 0,2,5      | 1350        | 2 at bottom                                 |
| PCNV033-13-2  | 1710-1880     | Panel Antenna, FET                                | X        | 20                 | 33                                  | 7.0                               | 2          | 1350        | 2 at bottom                                 |
| PCNV033-18-2  | 1710-1880     | Panel Antenna, FET                                | X        | 21                 | 33                                  | 5.5                               | 2          | 1840        | 2 at bottom                                 |
| 5164100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 14.5               | 65                                  | 14                                | 0-10       | 770         | 2 at bottom                                 |
| WBX085X10Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 14.8               | 80                                  | 10                                | 0, 2, 8    | 914         | 2 at bottom                                 |
| 5121100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 15                 | 65                                  | 12                                | 2-16       | 808         | 2 at bottom                                 |
| WBX065X10Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 15.8               | 65                                  | 10                                | 0,2,8      | 914         | 2 at bottom                                 |
| WBX085X13Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 16.4               | 80                                  | 7.0                               | 2,4        | 1372        | 2 at bottom                                 |
| 5178100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 16.5               | 65                                  | 9.0                               | 2-16       | 1040        | 2 at bottom                                 |
| WBX065P12R050 | 1710-2170     | Panel Antenna, VET, Inbuilt RET                   | X        | 16.8               | 65                                  | 8.0                               | 0-10       | 1219        | 2 at bottom                                 |
| WBX065P12R250 | 1710-2170     | Panel Antenna, VET, Inbuilt RET with Smart Bias-T | X        | 16.8               | 65                                  | 8.0                               | 0-10       | 1219        | 2 at bottom                                 |
| 5168100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 17                 | 65                                  | 8.0                               | 0-10       | 1390        | 2 at bottom                                 |
| W85-13-x010   | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 17                 | 85                                  | 6.3                               | 0-10       | 1385        | 2 at bottom                                 |
| WBX065X13Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 17.4               | 65                                  | 7.0                               | 0,2,4,8    | 1372        | 2 at bottom                                 |
| 5176xxx       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 17.5               | 65                                  | 7.0                               | 2-14       | 1433        | 2 at bottom                                 |
| WBX065P13R050 | 1710-2170     | Panel Antenna, VET, Inbuilt RET                   | X        | 17.5               | 65                                  | 6.5                               | 0-10       | 1372        | 2 at bottom                                 |
| WBX065P13R150 | 1710-2170     | Panel Antenna, VET, Inbuilt RET                   | X        | 17.5               | 65                                  | 6.5                               | 0-8        | 1372        | 2 at bottom                                 |
| WBX065P13R250 | 1710-2170     | Panel Antenna, VET, Inbuilt RET with Smart Bias-T | X        | 17.5               | 65                                  | 6.5                               | 0-8        | 1372        | 2 at bottom                                 |
| WBX085X18Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 18.0               | 80                                  | 4.5                               | 0,2,4      | 1839        | 2 at bottom                                 |
| W85-19-x28    | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 18.3               | 85                                  | 4.7                               | 2-8        | 1935        | 2 at bottom                                 |
| 5162100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 18.5               | 65                                  | 6.0                               | 0-10       | 1690        | 2 at bottom                                 |
| 5230100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 18.5               | 65                                  | 6.0                               | 4-14       | 1690        | 2 at bottom                                 |
| W65-13-x010   | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 18.5               | 65                                  | 6.2                               | 0-10       | 1385        | 2 at bottom                                 |
| 5142100       | 1710-2170     | Panel Antenna, VET, Optional RET                  | X        | 19.0               | 65                                  | 4.5                               | 2-10       | 1950        | 2 at bottom                                 |
| W65-19-A28    | 1710-2170     | Panel Antenna, VET                                | X        | 19.0               | 65                                  | 4.5                               | 2-8        | 1935        | 2 at bottom                                 |
| WBX065X18Fx00 | 1710-2170     | Panel Antenna, FET                                | X        | 19.0               | 65                                  | 4.5                               | 0,2,5      | 1839        | 2 at bottom                                 |
| WBX065P18R250 | 1710-2170     | Panel Antenna, VET, Inbuilt RET with Smart Bias-T | X        | 19.3               | 65                                  | 4.7                               | 2-8        | 1829        | 2 at bottom                                 |

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All information contained in the present data sheet is subject to confirmation at time of ordering.

Antennas

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## 1700 - 2200 MHz

### Single Band Panel Antennas (cont.)

| Part No.   | Band(s)<br>(MHz) | Description                                | Polarity | Nominal<br>Gain<br>(dBi) | Nominal<br>Horizontal<br>Beam<br>Width | Nominal<br>Vertical<br>Beam<br>Width | Tilt<br>(deg) | Length<br>(mm) | No. and<br>location of<br>7/16 DIN Skt<br>Connectors |
|------------|------------------|--|----------|--------------------------|--|--------------------------------------|---------------|----------------|--|
| 5152100    | 1710-2170        | Panel Antenna, VET,<br>Optional RET        | X        | 19.5                     | 45                                     | 5.5                                  | 0-10          | 1690           | 2 at bottom  |
| W65-19-x06 | 1710-2170        | Panel Antenna, VET,<br>Optional RET        | X        | 19.5                     | 65                                     | 4.5                                  | 0-6           | 1935           | 2 at bottom  |
| 5235100    | 1710-2170        | Panel Antenna, VET,<br>Optional RET        | X        | 20                       | 33                                     | 6.5                                  | 2-10          | 1460           | 2 at bottom  |
| 5135100    | 1710-2170        | Panel Antenna, VET,<br>Optional RET        | X        | 20.9                     | 33                                     | 5.5                                  | 0-10          | 1736           | 2 at bottom  |
| 5146100    | 1710-2170        | Panel Antenna, VET,<br>Optional RET        | X        | 23.5                     | 16                                     | 4.1                                  | 2-10          | 1990           | 2 at bottom  |
| 5032000    | 1900-2170        | Panel Antenna, FET,<br>Inbuilt MHA         | X        | 15.3                     | 73                                     | 5.5                                  | 0             | 2440           | 2 at bottom  |
| 5032006    | 1900-2170        | Panel Antenna, FET,<br>Inbuilt MHA         | X        | 15.3                     | 73                                     | 5.5                                  | 6             | 2440           | 2 at bottom  |
| 5162500    | 1920-2170        | Panel, VET, Inbuilt<br>RET and LNA (12 dB) | X        | 18.5                     | 65                                     | 6.0                                  | 0-10          | 1565           | 2 at bottom  |
| 5187300    | 1920-2170        | Panel, VET, Inbuilt<br>RET and LNA (12 dB) | X        | 18.5                     | 65                                     | 6.0                                  | 0-10          | 1710           | 2 at bottom  |
| 5230300    | 1920-2170        | Panel, VET, Inbuilt<br>RET and LNA (12 dB) | X        | 18.5                     | 65                                     | 6.0                                  | 4-14          | 1710           | 2 at bottom  |

#### Notes

- FET - Refers to a Fixed Electrical Tilt antenna
- RET - Refers to a Remote Electrical Tilt system
- VET - Refers to a Variable Electrical Tilt antenna
- x - Please refer to the detailed specifications for options

## Cellular Antenna Systems 1700 - 2200 MHz Twin-Array Panel Antennas

| Part No.      | Band(s)<br>(MHz)        | Description   | Polarity | Nominal<br>Gain<br>(dBi) | Nominal<br>Horizontal<br>Beam<br>Width<br>(deg) | Nominal<br>Vertical<br>Beam<br>Width<br>(deg) | Tilt<br>(deg) | Length<br>(mm) | No. and<br>location of<br>7/16 DIN Skt<br>Connectors |
|---------------|-------------------------|---|----------|--------------------------|---|---|---------------|----------------|--|
| WT85-19-xx    | 1710-1880/<br>1900-2170 | Twin Array Panel Antenna, FET                       | XX       | 17.0/17.0                | 85/85   | 5.3/4.8                                       | 2, 5, 8       | 1901           | 4 at bottom  |
| WT8565-19-AET | 1710-1880/<br>1900-2170 | Twin Array Panel Antenna, VET                       | XX       | 18.0/18.7                | 85/65   | 5/5   | 2-8/2-8       | 1900           | 4 at bottom  |
| 5153100       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 17.0/17.0                | 65/65   | 7/7   | 0-10/0-10     | 1430           | 4 at bottom  |
| 5177100       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 17.5/17.5                | 65/65   | 7/7   | 2-14/2-14     | 1450           | 4 at bottom  |
| 5157100       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 18.5/18.5                | 65/65   | 6/6   | 0-10/0-10     | 1730           | 4 at bottom  |
| 5157120       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 18.5/18.5                | 65/65   | 6/6   | 0-10/0-10     | 1706           | 4 at bottom  |
| 5232100       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 18.5/18.5                | 65/65   | 6/6   | 4-14/4-14     | 1710           | 4 at bottom  |
| WWT65-13-X010 | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 18.5/18.5                | 65/65   | 6.2/6.2                                       | 0-10/0-10     | 1385           | 4 at bottom  |
| 5257100       | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET                       | XX       | 19.0/19.0                | 65/65   | 4.5/4.5                                       | 2-10/2-10     | 1990           | 4 at bottom  |
| WWT65-19-A28  | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET                       | XX       | 19.0/19.0                | 65/65   | 4.5/4.5                                       | 2-8/2-8       | 1935           | 4 at bottom  |
| WWT65-19-x06  | 1710-2170/<br>1710-2170 | Twin Array Panel Antenna, VET                       | XX       | 19.5/19.5                | 65/65   | 4.5/4.5                                       | 0-6/0-6       | 1935           | 4 at bottom  |
| 5157300       | 1710-2170/<br>1920-1980 | Twin Array Panel Antenna,<br>Integrated TMA and RET | XX       | 18.5/18.5                | 65/65   | 6/6   | 0-10/0-10     | 1706           | 4 at bottom  |
| DMX065X20X050 | 1710-2170/<br>2400-2700 | Twin Array Panel Antenna, VET<br>Optional RET       | XX       | 19.0/18.8                | 65/65   | 4.3/4.6                                       | 2-8/2-8       | 1990           | 4 at bottom  |

### Notes

- FET - Refers to a Fixed Electrical Tilt antenna
- RET - Refers to a Remote Electrical Tilt system
- VET - Refers to a Variable Electrical Tilt antenna
- x - Please refer to the detailed specifications for options

## Cellular Antenna Systems 1700 - 2200 MHz Omni antennas

| Part No.  | Band(s)<br>(MHz) | Description       | Polarity | Nominal<br>Gain<br>(dBi) | Nominal<br>Horizontal<br>Beam<br>Width<br>(deg) | Nominal<br>Vertical<br>Beam<br>Width<br>(deg) | Tilt<br>(deg) | Length<br>(mm) | Termination  |
|-----------|------------------|-------------------|----------|--------------------------|---|---|---------------|----------------|--------------|
| W360-10-x | 1710-2170        | Omni Antenna, FET | V        | 8                        | 360   | 9   | 0,2,4,6       | 1200           | 7/16 DIN Skt |
| W360-17-x | 1710-2170        | Omni Antenna, FET | V        | 11.8                     | 360   | 5   | 0,2,5,6       | 2168           | 7/16 DIN Skt |

## Cellular Antenna Systems 1700 - 2200 MHz Tri-Sector antennas

| Part No.       | Band(s) (MHz)           | Description   | Polarity | Nominal Gain (dBi) | Nominal Horizontal Beam Width (deg) | Nominal Vertical Beam Width (deg) | Tilt (deg) | Length (mm) | No. and location of 7/16 DIN Skt Connectors |
|----------------|-------------------------|---|----------|--------------------|-------------------------------------|-----------------------------------|------------|-------------|---|
| WB3X080X12Fx50 | 1710-2170               | Tri-Sector Antenna, FET                                       | X X X    | 16.0               | 80                                  | 6.5                               | 2,6        | 1219        | 6 at bottom                                 |
| 5176703        | 1710-2170               | Tri-Sector Antenna, VET, Optional RET                         | X X X    | 17.5               | 65                                  | 7                                 | 2-14       | 1710        | 6 at bottom                                 |
| 5176903        | 1710-2170               | Tri-Sector Antenna, VET, Optional RET, Indep. Azimuth Adjust. | X X X    | 17.5               | 65                                  | 7                                 | 2-14       | 1710        | 6 at bottom                                 |
| WB3X072X18x00  | 1710-2170               | Tri-Sector Antenna, VET, Optional RET                         | X X X    | 18.0               | 72                                  | 6.2                               | 0-10       | 1828        | 6 at bottom                                 |
| 5162703        | 1710-2170               | Tri-Sector Antenna, VET, Optional RET                         | X X X    | 18.5               | 65                                  | 6                                 | 0-10       | 1940        | 6 at bottom                                 |
| 5230703        | 1710-2170               | Tri-Sector Antenna, VET, Optional RET                         | X X X    | 18.5               | 65                                  | 6                                 | 4-14       | 1937        | 6 at bottom                                 |
| 5230903        | 1710-2170               | Tri-Sector Antenna, VET, Optional RET, Indep. Azimuth Adjust. | X X X    | 18.5               | 65                                  | 6                                 | 4-14       | 1937        | 6 at bottom                                 |
| WB3X072X24x00  | 1710-2170               | Tri-Sector Antenna, VET, Optional RET                         | X X X    | 19.0               | 72                                  | 4.5                               | 0-6        | 2337        | 6 at bottom                                 |
| 5177703        | 1710-2170/<br>1710-2170 | Tri-Sector, Twin Array Panel Antenna, VET                     | 3 by XX  | 7.5/17.5           | 65/65                               | 7/7                               | 2-14/2-14  | 1710        | 12 at bottom                                |
| WB3X065T17x00  | 1710-2170/<br>1710-2170 | Tri-Sector, Twin Array Panel Antenna, VET                     | 3 by XX  | 7.5/17.5           | 65/65                               | 6.2/6.2                           | 2-10/2-10  | 1727        | 12 at bottom                                |

## Cellular Antenna Systems 1700 - 2200 MHz Yagi antennas

| Part No. | Band(s) (MHz) | Description                         | Polarity | Nominal Gain (dBi) | Nominal Horizontal Beam Width (deg) | Nominal Vertical Beam Width (deg) | Length (mm) | Termination  |
|----------|---------------|-------------------------------------|----------|--------------------|-------------------------------------|-----------------------------------|-------------|--------------|
| 7478000  | 806-2200      | Yagi, Log periodic                  | V/H      | 11.5               | 51                                  | 41                                | 1283        | N Skt        |
| 7363180  | 1710-1880     | Yagi, Antenna                       | V/H      | 13.0               | 44                                  | 38                                | 660         | N Skt        |
| 7366200  | 1710-1880     | Yagi Antenna                        | V / H    | 14.0               | 34                                  | 33                                | 840         | 7/16 DIN Skt |
| 7366179  | 1710-1880     | Yagi Antenna, Fire Retardant Shroud | V / H    | 14.0               | 34                                  | 33                                | 840         | N Skt        |
| 7360200  | 1710-1880     | Yagi Antenna                        | V / H    | 17.0               | 26                                  | 24                                | 126         | 7/16 DIN Skt |
| 7360003  | 1710-1880     | Yagi Antenna                        | V / H    | 17.0               | 26                                  | 24                                | 1260        | N Skt        |
| 7360179  | 1710-1880     | Yagi Antenna, Fire Retardant Shroud | V / H    | 17.0               | 26                                  | 24                                | 1260        | N Skt        |
| 7486000  | 1710-2500     | Yagi Antenna, Log Periodic          | V / H    | 12.5               | 48                                  | 41                                | 660         | N Skt        |
| 7360008  | 1900-2170     | Yagi Antenna                        | V / H    | 15.0               | 28                                  | 26                                | 1090        | N Skt        |