

# 3x 2x2 MiMo 4G/5G Wall / Mast Mount Antenna

DWMM6[X]-6-60-[X]

## DWMM6[X]-6-60-[X]

- 3x 2x2 MiMo 4G/5G Omni-Directional Antenna
- Mast, Wall or Desk Mount
- Optional L1 or L1/L5 GPS/GNSS
- Integral FRZH Rated Coaxial Cables



The DWMM6[X]-6-60-[X] antenna provides a 3x 2x2 MiMo omnidirectional antenna solution for global 4G/5G networks covering 617-6000MHz. It features eight separately fed ultra-wideband elements in a single housing and is suitable for a wide range of fixed-site, branch office and enterprise failover applications using cellular bonding / aggregation.

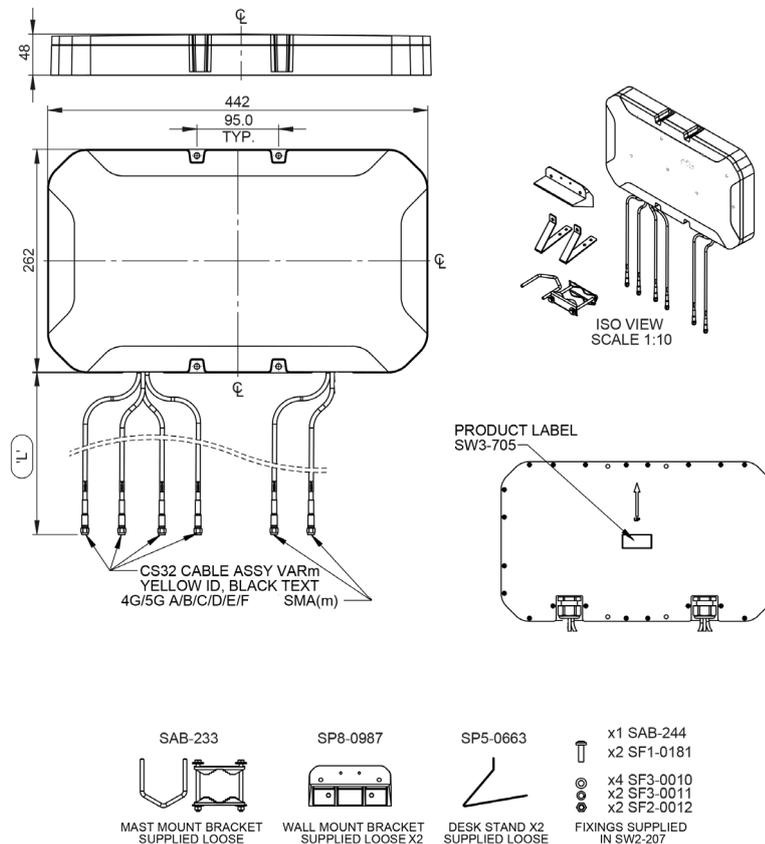
The mounting bracket enables mast mounting using the supplied clamp assembly or it can be wall-mounted using the supplied screws and wall plugs. The antenna can be fitted directly to non-conductive panels or internal walls and mounting feet are supplied to allow it to be stood on a desk or window sill.

The omni-directional radiation pattern allows easy placement of the antenna without consideration of directional alignment and makes it ideal where access to multiple network sites is required. The DWMM6G version incorporates an integral GPS/GNSS antenna with 26dB or 30dB / 26dB LNA gain and advanced filtering for resilient operation.

The antenna has integral flame retardant coaxial cables, which eliminate or reduce exposed connector joints and simplify installation. Versions with SMA plugs offer direct connection to many routers while those with N Jacks allow connection of longer cables runs of low loss cable.

### Technical Drawing

DWMM6-6-60-VARSP Shown



# 3x 2x2 MiMo 4G/5G Wall / Mast Mount Antenna

DWMM6[X]-6-60-[X]

Product Data

| Part No.                                 |                  | DWMM6-6-60-05NJ                                      | DWMM6-6-60-5SP |
|--|------------------|--|----------------|
| <b>Electrical Data</b>                   |                  |  |                |
| Frequency Range (MHz)                    | Elements 1-6     | 6x 617-960 / 1427-6000                               |                |
| Operational Band                         | Elements 1-6     | 4G/5G  |                |
| Typical VSWR*                            |                  | <2.5:1   |                |
| Typical Peak Gain - Elements 1-6 (dBi)** | 617-960MHz       | 5.1  |                |
|  | 1427-6000MHz     | 8.1  |                |
| Typical Efficiency***                    | 617-960MHz       | 68%  |                |
|  | 1427-6000MHz     | 76%  |                |
| Correlation Co-efficient                 |                  | < 0.1  |                |
| Polarisation                             |                  | +/-45 degrees  |                |
| Pattern                                  |                  | Hybrid   |                |
| Impedance                                |                  | 50Ω  |                |
| Max Input Power (W)                      |                  | 10   |                |
| <b>Mechanical Data</b>                   |                  |  |                |
| Dimensions (mm)                          | Length           | 442 (17.4")  |                |
|  | Height Excl Brkt | 262 (10.3")  |                |
|  | Depth            | 48 (1.9")  |                |
| Operating Temp (°C)                      |                  | -40° / +85°C ( -40° / 185°F )                        |                |
| Radome Material                          |                  | ASA - UL 746C F1, UL 94-HB                           |                |
| Colour                                   |                  | White  |                |
| Ingress Protection                       |                  | IP66   |                |
| Typical Wind Load @ 45 m/s (N) †         |                  | 470  |                |
| <b>Mounting Data</b>                     |                  |  |                |
| Fixing                                   |                  | Wall, Mast, Rail or Panel Mount                      |                |
| Max Mast Diameter (mm)                   |                  | 50 (1.96")   |                |
| <b>Cable Data</b>                        |                  |  |                |
| 4G/5G Cables                             | Type             | CS32 (EN45545-2 Compliant - meets CPR Dca s2 d1 a1 ) |                |
|  | Diameter (mm)    | 5 (0.19")  |                |
|  | Length (m)       | 0.5 (1' 6")  | 5 (16' 4")     |
|  | Termination      | 6x N(f)  | 6x SMA (m)     |

\* Typical VSWR as measured across 95% of relevant bands in free space with 0.5m (1.6') of CS32 cable.

\*\* Typical Peak gain as measured in free space with 0.5m (1.6') of CS32 cable.

\*\*\*Typical efficiency represents average efficiency across stated bands as measured in free space with 0.5m (1.6') of CS32 cable.

† When installed in correctly in full accordance with the installation instructions

# 3x 2x2 MiMo 4G/5G Wall / Mast Mount Antenna

PANORAMA ANTENNAS

DWMM6[X]-6-60-[X]

## Electrical Data

Part No.

DWMM6G-6-60-05NJ

DWMM6G-6-60-5SP

### Electrical Data

|                       |              |                        |
|-----------------------|--------------|------------------------|
| Frequency Range (MHz) | Elements 1-6 | 6x 617-960 / 1427-6000 |
|                       | Element 7    | 1x 1559-1612           |

|                  |              |             |
|------------------|--------------|-------------|
| Operational Band | Elements 1-6 | 2G/3G/4G/5G |
|                  | Element 7    | GPS/GNSS    |

|               |  |        |
|---------------|--|--------|
| Typical VSWR* |  | <2.5:1 |
|---------------|--|--------|

|  |              |     |
|--|--------------|-----|
| Typical Peak Gain - Elements 1-6 (dBi)** | 617-960MHz   | 5.1 |
|  | 1427-6000MHz | 8.1 |

|                       |              |     |
|-----------------------|--------------|-----|
| Typical Efficiency*** | 617-960MHz   | 68% |
|                       | 1427-6000MHz | 76% |

|                          |  |       |
|--------------------------|--|-------|
| Correlation Co-efficient |  | < 0.1 |
|--------------------------|--|-------|

|              |  |               |
|--------------|--|---------------|
| Polarisation |  | +/-45 degrees |
|--------------|--|---------------|

|         |  |        |
|---------|--|--------|
| Pattern |  | Hybrid |
|---------|--|--------|

|           |  |     |
|-----------|--|-----|
| Impedance |  | 50Ω |
|-----------|--|-----|

|                     |  |    |
|---------------------|--|----|
| Max Input Power (W) |  | 10 |
|---------------------|--|----|

### GPS/GNSS Data

|                       |  |           |
|-----------------------|--|-----------|
| Frequency Range (MHz) |  | 1559-1612 |
|-----------------------|--|-----------|

|              |  |        |
|--------------|--|--------|
| Typical VSWR |  | <2.5:1 |
|--------------|--|--------|

|          |  |             |
|----------|--|-------------|
| LNA Gain |  | 26dB (+/-3) |
|----------|--|-------------|

|              |  |      |
|--------------|--|------|
| Polarisation |  | RHCP |
|--------------|--|------|

|                   |  |               |
|-------------------|--|---------------|
| Operating Voltage |  | 3-5 VDC <20ma |
|-------------------|--|---------------|

### Mechanical Data

|                 |                  |             |
|-----------------|------------------|-------------|
| Dimensions (mm) | Length           | 442 (17.4") |
|                 | Height Excl Brkt | 262 (10.3") |
|                 | Depth            | 48 (1.9")   |

|                     |  |                               |
|---------------------|--|-------------------------------|
| Operating Temp (°C) |  | -40° / +85°C ( -40° / 185°F ) |
|---------------------|--|-------------------------------|

|                 |  |                            |
|-----------------|--|----------------------------|
| Radome Material |  | ASA - UL 746C F1, UL 94-HB |
|-----------------|--|----------------------------|

|        |  |       |
|--------|--|-------|
| Colour |  | White |
|--------|--|-------|

|                    |  |      |
|--------------------|--|------|
| Ingress Protection |  | IP66 |
|--------------------|--|------|

|                                  |  |     |
|----------------------------------|--|-----|
| Typical Wind Load @ 45 m/s (N) † |  | 470 |
|----------------------------------|--|-----|

### Mounting Data

|        |  |                                 |
|--------|--|---------------------------------|
| Fixing |  | Wall, Mast, Rail or Panel Mount |
|--------|--|---------------------------------|

|                        |  |            |
|------------------------|--|------------|
| Max Mast Diameter (mm) |  | 50 (1.96") |
|------------------------|--|------------|

### Cable Data

|              |               |  |            |
|--------------|---------------|--|------------|
| 4G/5G Cables | Type          | CS32 (EN45545-2 Compliant - meets CPR Dca s2 d1 a1 ) |            |
|              | Diameter (mm) | 5 (0.19")  |            |
|              | Length (m)    | 0.5 (1' 6")  | 5 (16' 4") |
|              | Termination   | 6x N(f)  | 6x SMA (m) |

|                 |               |                               |            |
|-----------------|---------------|-------------------------------|------------|
| GPS/GNSS Cables | Type          | CS29 FR (EN45545-2 Compliant) |            |
|                 | Diameter (mm) | 5 (0.19")                     |            |
|                 | Length (m)    | 0.5 (1' 6")                   | 5 (16' 4") |
|                 | Termination   | 1x N(f)                       | 1x SMA (m) |

\* Typical VSWR as measured across 95% of relevant bands in free space with 0.5m (1.6') of CS32 cable.

\*\* Typical Peak gain as measured in free space with 0.5m (1.6') of CS32 cable. † When installed in correctly in full accordance with the installation instructions

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## Electrical Data

| Part No.                                 |                  | DWMM65G-6-60-05NJ                                    | DWMM65G-6-60-5SP |
|--|------------------|--|------------------|
| <b>Electrical Data</b>                   |                  |  |                  |
| Frequency Range (MHz)                    | Elements 1-6     | 6x 617-960 / 1427-6000                               |                  |
|  | Element 7        | 1x 1164-1189 / 1559-1612                             |                  |
| Operational Band                         | Elements 1-6     | 2G/3G/4G/5G  |                  |
|  | Element 7        | GPS/GNSS   |                  |
| Typical VSWR*                            |                  | <2.5:1   |                  |
| Typical Peak Gain - Elements 1-6 (dBi)** | 617-960MHz       | 5.1  |                  |
|  | 1427-6000MHz     | 8.1  |                  |
| Typical Efficiency***                    | 617-960MHz       | 68%  |                  |
|  | 1427-6000MHz     | 76%  |                  |
| Correlation Co-efficient                 |                  | < 0.1  |                  |
| Polarisation                             |                  | +/-45 degrees  |                  |
| Pattern                                  |                  | Hybrid   |                  |
| Impedance                                |                  | 50Ω  |                  |
| Max Input Power (W)                      |                  | 10   |                  |
| <b>GPS/GNSS Data</b>                     |                  |  |                  |
| Frequency Range (MHz)                    |                  | 1164-1189 / 1559-1612                                |                  |
| Typical VSWR                             |                  | <2.5:1   |                  |
| LNA Gain                                 |                  | 30dB / 26dB (+/-7.5)                                 |                  |
| Polarisation                             |                  | RHCP   |                  |
| Operating Voltage                        |                  | 3-5v 36ma Typical                                    |                  |
| <b>Mechanical Data</b>                   |                  |  |                  |
| Dimensions (mm)                          | Length           | 442 (17.4")  |                  |
|  | Height Excl Brkt | 262 (10.3")  |                  |
|  | Depth            | 48 (1.9")  |                  |
| Operating Temp (°C)                      |                  | -40° / +85°C ( -40° / 185°F )                        |                  |
| Radome Material                          |                  | ASA -UL 746C F1, UL 94-HB                            |                  |
| Colour                                   |                  | White  |                  |
| Ingress Protection                       |                  | IP66   |                  |
| Typical Wind Load @ 45 m/s (N) †         |                  | 470  |                  |
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| GPS/GNSS Cables                          | Type             | CS29 FR (EN45545-2 Compliant)                        |                  |
|  | Diameter (mm)    | 5 (0.19")  |                  |
|  | Length (m)       | 0.5 (1' 6")  | 5 (16' 4")       |
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