

# Powertec 4G-5G & WiFi 3-in-1 Combination, Antenna, 698 to 7125 MHz

SKU: ANT-PT-00026  
 MPN: 3LST-6971-2

## Description

3LST-6971-2 is a 3-in-1 combination antenna that provides 4G-5G cellular connectivity in 2x2 MIMO using two cables, and supports WiFi-6E in SISO on the third cable. The antenna has an IP65 ingress protection rating and an M20 stud mounting.

Test data show modest performance on all three elements, making it suitable for cost-effective large-scale IoT rollouts.

The antenna is supplied standard with three 3 metre L-100 coaxial cables with SMA Male connectors.

## RF Specification

### Cable 1: 4G-5G

|                   |          |                  |        |
|-------------------|----------|------------------|--------|
| Start Frequency:  | 698 MHz  | Polarisation:    | Linear |
| Stop Frequency:   | 2700 MHz | Input Impedance: | 50     |
| Max. Input Power: | 5 W      |                  |        |

### RF Connectors

| Ports | RF Interface  | Powertec | Body Shape | Cable Series | Length  |
|-------|---|----------|------------|--------------|---------|
| 1     |  |          | Straight   | L-100        | 3000 mm |

Frequency Test Data

Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

| Start Freq. | Stop Freq. | Peak Gain | Return Loss | VSWR  | Azimuth | Efficiency |
|-------------|------------|-----------|-------------|-------|---------|------------|
| 698 MHz     | 960 MHz    | 2.93 dBi  | > 10 dB     | < 2:1 | 360°    | 40%        |
| 1710 MHz    | 2170 MHz   | 2.86 dBi  | > 10 dB     | < 2:1 | 360°    | 37%        |
| 2500 MHz    | 2700 MHz   | 4.99 dBi  | > 10 dB     | < 2:1 | 360°    | 41%        |

## Cable 2: 4G-5G

|                   |          |                  |        |
|-------------------|----------|------------------|--------|
| Start Frequency:  | 698 MHz  | Polarisation:    | Linear |
| Stop Frequency:   | 2700 MHz | Input Impedance: | 50     |
| Max. Input Power: | 5 W      |                  |        |

### RF Connectors

| Ports | RF Interface | Body Shape | Cable Series | Length  |
|-------|--------------|------------|--------------|---------|
| 1     | SMA Male     | Straight   | L-100        | 3000 mm |

### Frequency Test Data

| Start Freq. | Stop Freq. | Peak Gain | Return Loss | VSWR  | Azimuth | Efficiency |
|-------------|------------|-----------|-------------|-------|---------|------------|
| 698 MHz     | 960 MHz    | 3.19 dBi  | > 10 dB     | < 2:1 | 360°    | 44%        |
| 1710 MHz    | 2170 MHz   | 3.89 dBi  | > 10 dB     | < 2:1 | 360°    | 40%        |
| 2500 MHz    | 2700 MHz   | 5.35 dBi  | > 10 dB     | < 2:1 | 360°    | 45%        |

## Cable 3: WiFi

|                   |          |                  |        |
|-------------------|----------|------------------|--------|
| Start Frequency:  | 2400 MHz | Polarisation:    | Linear |
| Stop Frequency:   | 7125 MHz | Input Impedance: | 50     |
| Max. Input Power: | 5 W      |                  |        |

### RF Connectors

| Ports | RF Interface | Body Shape | Cable Series | Length  |
|-------|--------------|------------|--------------|---------|
| 1     | SMA Male     | Straight   | L-100        | 3000 mm |

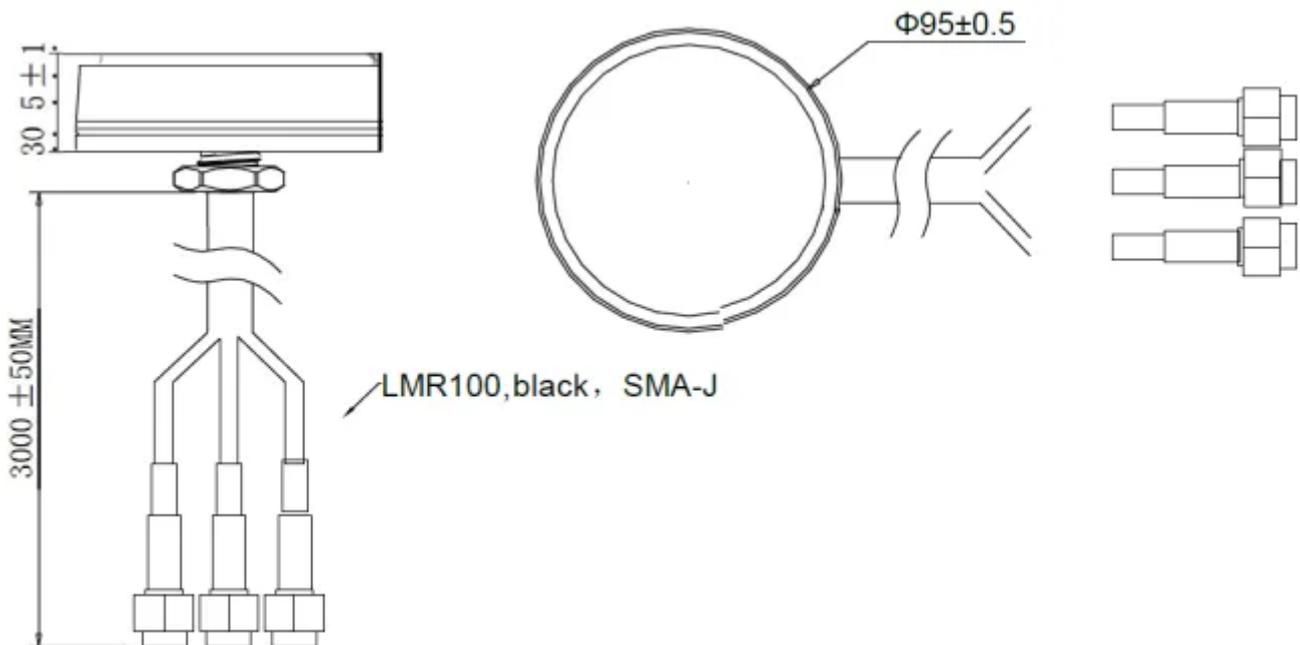
### Frequency Test Data

| Start Freq. | Stop Freq. | Peak Gain | Return Loss | VSWR  | Azimuth | Efficiency |
|-------------|------------|-----------|-------------|-------|---------|------------|
| 2400 MHz    | 2500 MHz   | 0.46 dBi  | > 10 dB     | < 2:1 | 360°    | 30%        |
| 5150 MHz    | 5850 MHz   | 1.28 dBi  | > 10 dB     | < 2:1 | 360°    | 33%        |
| 5925 MHz    | 7125 MHz   | 2.31 dBi  | > 10 dB     | < 2:1 | 360°    | 36%        |

# Physical Specification

|                             |                    |                            |                             |
|-----------------------------|--------------------|----------------------------|-----------------------------|
| Subtype:                    | Fin / Stud / Combo | Dimensions:                | 30.5 x 95 (H x Dia)         |
| Input Ports:                | 3                  | Ingress Protection:        | IP65                        |
| MIMO:                       | 2x2 MIMO           | Mounting:                  | Stud / Bulkhead / Panel     |
| Min. Operating Temperature: | -20 °C             | Compliance/Certifications: | ISO 9001 Quality Management |
| Max. Operating Temperature: | 70 °C              | Mechanical Compliance:     | IEC 60068-2-11: Salt Mist   |

## Drawing



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