

## P1-BU15-N0

### P1-BU15-N0N

#### Features

- 2 ports / 1 cross pol system in low band (694-960 MHz)
- 2 ports / 1 cross pol system in high band (1427-2690 MHz)
- Integrated and field replaceable SRET
- Optional with Direct Pipe No Tilt mounting hardware (Model name suffix -N0N)
- Compliant with AISG v2.0 and 3GPP

|                  |                         |  |  |
|------------------|-------------------------|--|--|
| PRODUCT OVERVIEW | Frequency Range (MHz)   | (1x) 694-960                               | (1x) 1427-2690                           |
|                  | Array                   | <span style="color: red;">■</span> R1      | <span style="color: yellow;">■</span> Y1 |
|                  | Connector               | 1-2  | 3-4                                      |
|                  |                         | 4 PORTS                                    |  |
|                  | Polarization            | XPOL                                       |  |
|                  | Azimuth Beamwidth (avg) | 65°  | 65°                                      |
|                  | Electrical Downtilt     | 2-12°                                      | 2-12°                                    |
|                  | Dimensions              | 1498 x 278 x 168 mm (59.0 x 10.9 x 6.6 in) |  |

#### ORDERING OPTIONS Select from the following ordering options

| ANTENNA MODEL NUMBER | CONFIGURATION                         | MOUNTING HARDWARE   | MOUNTING PIPE DIAMETER    | SHIPPING WEIGHT       | MOUNTING HARDWARE WEIGHT |
|----------------------|---------------------------------------|---|---------------------------|-----------------------|--------------------------|
| P1-BU15-N0           | ACU-I20-H12I<br>Internal RET Included | APM50-H1<br>Beam Tilt Kit Included                        | 50-125 mm<br>(2.0-4.9 in) | 19.6 kg<br>(43.2 lbs) | 4 kg (8.8 lbs)           |
| P1-BU15-N0N          | ACU-I20-H12I<br>Internal RET Included | APM50-H1N<br>Direct Pipe No Tilt<br>Mounting Kit Included | 50-125 mm<br>(2.0-4.9 in) | 18.9 kg<br>(41 lbs)   | 3 kg (6.6 lbs)           |



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### P1-BU15-N0N

#### ELECTRICAL SPECIFICATIONS

■ R1

|  |                |         |                |              |              |
|--|----------------|---------|----------------|--------------|--------------|
| Frequency Range  |                | MHz     | 694-960        |              |              |
|  |                | MHz     | 694-806        | 790-894      | 880-960      |
| Polarization   |                | ---     | ±45°           |              |              |
| Gain   | Over all Tilts | dBi     | 14.6 ± 0.7     | 14.8 ± 0.6   | 14.8 ± 0.6   |
|  | Max Gain       | dBi     | 15.3           | 15.4         | 15.4         |
| Azimuth Beamwidth (3 dB)   |                | degrees | 73.9° ± 2.6°   | 70.2° ± 2.4° | 66° ± 2.7°   |
| Elevation Beamwidth (3 dB)                                       |                | degrees | 15.1° ± 1.2°   | 13.7° ± 0.8° | 12.8° ± 0.7° |
| Electrical Downtilt  |                | degrees | 2-12°          |              |              |
| Impedance  |                | Ohms    | 50Ω            |              |              |
| VSWR (Return Loss)   |                | ---     | 1.5:1 (-14 dB) |              |              |
| Passive Intermodulation<br>3rd Order for 2x20 W Carriers         |                | dBc     | -153           |              |              |
| Front-to-Back Ratio, Total Power, ± 30°                          |                | dB      | 21.5           | 22.1         | 23.2         |
| First Upper Side Lobe Suppression                                |                | dB      | 15.8           | 17.3         | 17.7         |
| Cross Polar Discrimination (XPD)<br>at Mechanical Boresight (0°) |                | dB      | 19.7           | 19.7         | 21.3         |
| Maximum Effective Power Per Port                                 |                | Watts   | 250 W          |              |              |
| Cross Polar Isolation  |                | dB      | 26             |              |              |
| Interband Isolation  |                | dB      | 28             |              |              |

Specifications follow BASTA guidelines.

#### ELECTRICAL SPECIFICATIONS

■ Y1

|  |                |         |                |              |              |              |              |
|--|----------------|---------|----------------|--------------|--------------|--------------|--------------|
| Frequency Range  |                | MHz     | 1427-2690      |              |              |              |              |
|  |                | MHz     | 1427-1518      | 1695-1880    | 1920-2170    | 2300-2400    | 2490-2690    |
| Polarization   |                | ---     | ±45°           |              |              |              |              |
| Gain   | Over all Tilts | dBi     | 16.6 ± 0.6     | 17.4 ± 0.5   | 17.7 ± 0.3   | 17.3 ± 0.5   | 17.5 ± 0.5   |
|  | Max Gain       | dBi     | 17.2           | 17.9         | 18           | 17.8         | 18           |
| Azimuth Beamwidth (3 dB)   |                | degrees | 60° ± 4°       | 62.4° ± 5.2° | 66.5° ± 4.2° | 59.7° ± 3.5° | 55.6° ± 5.5° |
| Elevation Beamwidth (3 dB)                                       |                | degrees | 7.7° ± 0.5°    | 6.5° ± 0.6°  | 5.8° ± 0.4°  | 5.5° ± 0.3°  | 5.2° ± 0.3°  |
| Electrical Downtilt  |                | degrees | 2-12°          |              |              |              |              |
| Impedance  |                | Ohms    | 50Ω            |              |              |              |              |
| VSWR (Return Loss)   |                | ---     | 1.5:1 (-14 dB) |              |              |              |              |
| Passive Intermodulation<br>3rd Order for 2x20 W Carriers         |                | dBc     | -153           |              |              |              |              |
| Front-to-Back Ratio, Total Power, ± 30°                          |                | dB      | 26.2           | 22.8         | 23.1         | 23           | 22.8         |
| First Upper Side Lobe Suppression                                |                | dB      | 15.3           | 15.4         | 16           | 19.2         | 16.4         |
| Cross Polar Discrimination (XPD)<br>at Mechanical Boresight (0°) |                | dB      | 23.4           | 25.5         | 25.1         | 21.1         | 22.2         |
| Maximum Effective Power Per Port                                 |                | Watts   | 200 W          |              |              |              |              |
| Cross Polar Isolation  |                | dB      | 26             |              |              |              |              |
| Interband Isolation  |                | dB      | 28             |              |              |              |              |

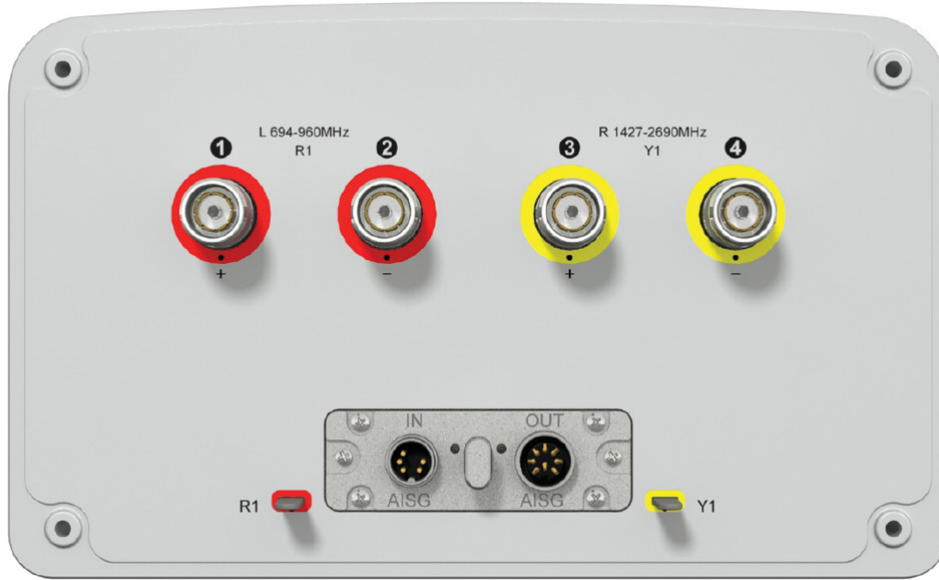
Specifications follow BASTA guidelines.

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## P1-BU15-N0

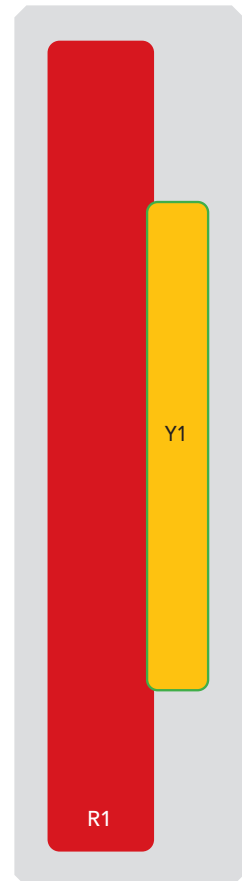
P1-BU15-N0N

### BOTTOM VIEW - LABELING



### ARRAY LAYOUT

| ARRAY                                    | FREQUENCY     | CONNECTOR | CONNECTOR TYPE     | RET | AISG RET UID    |
|--|---------------|-----------|--------------------|-----|-----------------|
| <span style="color: red;">■</span> R1    | 694-960 MHz   | 1-2       | (2x) 4.3-10 Female | R1  | RFxxxxxxxxxx-R1 |
| <span style="color: yellow;">■</span> Y1 | 1427-2690 MHz | 3-4       | (2x) 4.3-10 Female | Y1  | RFxxxxxxxxxx-Y1 |



The illustration is not shown to scale.

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### MECHANICAL SPECIFICATIONS

|  |                                       |   |
|--|---------------------------------------|---|
| Length                                     | mm (in)                               | 1498 (59.0)   |
| Width                                      | mm (in)                               | 278 (10.9)  |
| Depth                                      | mm (in)                               | 168 (6.6)   |
| Net Weight - Antenna Only                  | kg (lbs)                              | 12.6 (27.8)   |
| Wind Load<br>Rated at<br>150 km/h (93 mph) | Front                                 | N (lbf) 501 (113)   |
|  | Side                                  | N (lbf) 335 (75)  |
|  | Rear                                  | N (lbf) 399 (90)  |
| Survival Wind Speed                        | km/h (mph)                            | 200 (124)   |
| Connector Type                             | --                                    | (4x) 4.3-10 Female, (2x) AISG Connectors (1 Male, 1 Female) at Bottom |
| Radome Color                               | ---                                   | Light Grey  |
| Radome Material                            | ---                                   | Fiberglass  |
| Lightning Protection                       | ---                                   | DC Ground   |
| <b>Shipping</b>                            | Packing Size (Length x Width x Depth) | mm (in) 1678 x 373 x 278 (66.1 x 14.7 x 10.9)                         |

### ENVIRONMENTAL SPECIFICATIONS

|                                  |         |                                  |
|----------------------------------|---------|----------------------------------|
| Environmental Standard           | ---     | ETS 300 019                      |
| Operating Temperature            | degrees | -40° to +60° C (-40° to +140° F) |
| Product Environmental Compliance | ---     | Product is RoHS Compliant        |

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### ACCESSORIES

Accessories may be ordered separately unless otherwise indicated.

| ITEM   | MODEL NUMBER | WEIGHT         |
|--|--------------|----------------|
| Beam Tilt Mounting Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in)<br><i>Refer to ordering options</i>  | APM50-H1     | 4 kg (8.8 lbs) |
| Direct Pipe No Tilt Bracket Kit for Pole Diameter 50-125 mm (2.0-4.9 in)<br><i>Refer to ordering options</i> | APM50-H1N    | 3 kg (6.6 lbs) |

### INSTALLATION

Please read all installation notes before installing product.

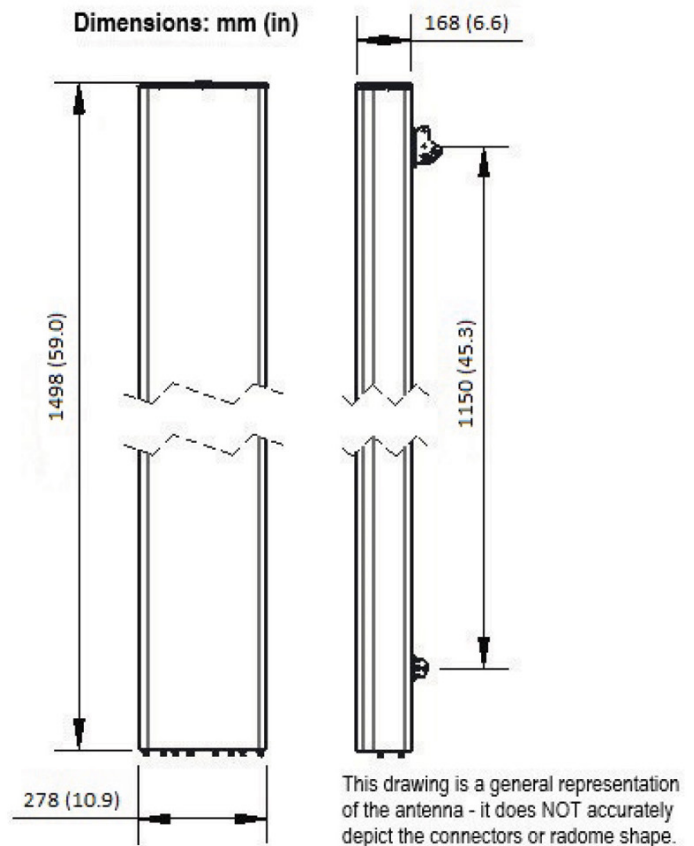


Always attach the antenna using all mounting points.

Do not install antenna with the connectors facing upwards.

### EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



### NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)