## Product Specifications

## XGU-465

## Antenna Systems Group

X-Pol dual band antenna, 698-960/1695-2700 MHz $50.5^{\prime \prime}, 65^{\circ}$ horizontal beamwidth
Fixed electrical tilt

- Separate housing and reflector construction optimizes RF performance while maximizing mechanical strength
- DAS/ODAS/small-cell antenna with high power design
- AWS-3 \& WCS ready
- Suitable for LTE/CDMA/UMTS/GSM/neutral host
- Good passive intermodulation (PIM) performance reduces harmful interference

- Integrated diplexers minimize cabling costs and improves aesthetics

| Includes integrated diplexers | Antenna |
| :--- | :---: |
| Reduces mainline cables | nitegated diplexers |
| Eliminates external tower devices | Man feed ines |
| $\downarrow \downarrow$ |  |


| ELECTRICAL SPECIFICATIONS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency band, MHz | 698-745 | 746-896 | 897-960 | $\begin{gathered} 1695- \\ 2180 \end{gathered}$ | $\begin{gathered} \text { 2181- } \\ 2360 \end{gathered}$ | $\begin{aligned} & 2496- \\ & 2700 \end{aligned}$ |
| Horizontal beamwidth, 3 dB point (average) | $71^{\circ}$ | $69^{\circ}$ | $66^{\circ}$ | $58^{\circ}$ | $58^{\circ}$ | $59^{\circ}$ |
| Gain, dBi (average) | 13.9 | 15.5 | 15.2 | 17.3 | 16.7 | 17.6 |
| Vertical beamwidth, 3 dB points (average) | $17.7^{\circ}$ | $16^{\circ}$ | $15^{\circ}$ | $7.5^{\circ}$ | $6.4{ }^{\circ}$ | $5.9{ }^{\circ}$ |
| Upper sidelobe suppression, typical, dB | >18 | >18 | >18 | >18 | >18 | >18 |
| VSWR / return loss, dB, maximum | 1.7/11.7 | 1.5/14.0 | $1.7 / 11.7$ | 1.5/14.0 | 1.7/11.7 | 1.7/11.7 |
| Polarization | $+/-45^{\circ}$ |  |  | $+/-45^{\circ}$ |  |  |
| Electrical down tilt, fixed | $0^{\circ}$ |  |  | $0^{\circ}$ |  |  |
| Isolation between ports, dB , minimum | $>25$ |  |  | $>25$ |  |  |
| Intermodulation (2 x 20 w), IM3, dBc, maximum | -153 |  |  | -153 |  |  |
| Impedance, ohms | 50 |  |  | 50 |  |  |
| Maximum power per connector, CW (w) | 500 @ 800 MHz |  |  | 250 @ 1900 MHz |  |  |

## MECHANICAL SPECIFICATIONS

| Dimensions, length/width/depth | $50.5 / 14.6 / 8.2 \mathrm{in} .(1283 / 372 / 208 \mathrm{~mm})$ |
| :--- | :--- |
| Connector (quantity) type | $(2)$ For diplexed (4) for non-diplexed version 7-16 female DIN |
| Connector torque | $220-265 \mathrm{lbf} \cdot \mathrm{in}(23-30 \mathrm{~N}-\mathrm{m})$ |
| Connector location | Back |
| Antenna weight | $27.0 \mathrm{lb}(12.3 \mathrm{~kg})$ |
| Bracket weight | $13.2 \mathrm{lb}(6.0 \mathrm{~kg})$ |
| Standard bracket kit | 919011 (included) |
| Mechanical down tilt range | $0-12^{\circ}$ |
| Radome material | High strength Luran ${ }^{\circledR}$, , UV stabilized, ASTM D1925 |
| Wind survival | $150 \mathrm{mph}(241 \mathrm{~km} / \mathrm{h})$ |
| Front wind load @ 100 mph | $127.1 \mathrm{lbf}(565.3 \mathrm{~N})$ |
| Equivalent flat plate @ 100 mph | $2.53 \mathrm{sq} \mathrm{ft}(\mathrm{c}=2)$ |


| ORDER INFORMATION |  |
| :--- | :--- |
| MODEL | DESCRIPTION |
| XGU-465-I | $4 \mathrm{~F}, \mathrm{X}-$ pol, LB/HB $65^{\circ} 0 \% / 0^{\circ} \mathrm{EDT}$, with 2 DIN (F) connectors and internal diplexers |
| XGU-465 | $4 \mathrm{~F}, \mathrm{X}-$ pol, LB/HB $65^{\circ} 0^{\circ} / 0^{\circ} \mathrm{EDT}$, with 4 DIN (F) connectors |
| 919036 | Optional bracket kit, 2-point, 12 deg D-tilt, for 4.5" OD pole |

## Mechanical View: XGU-465-I (internally diplexed)



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Standard bracket kit, 919011


Optional bracket kit, 919036
$36 \underset{[374 \mathrm{~mm}]}{14.7 \mathrm{in}}-$


