

## XPOL panel antenna 90°, 13 dBi, 380 - 470 MHz

### DESCRIPTION

- The 760/766 series of UHF Panel antenna has been designed for TETRA / UHF Trunked Radio applications, offering a stable performance an PIM specification over a wide bandwidth.
- Available in VPOL and XPOL formats, the main housing of the antenna is made from corrosion resistant marine grade aluminium.
- The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.
- Former Skymasts brand product.



### SPECIFICATIONS

| Electrical                     |  |
|--------------------------------|--|
| Model                          | 766.90.13.00   |
| Frequency                      | 380 - 470 MHz  |
| Max. Input Power               | 2 x 400 W  |
| Polarisation                   | ±45°   |
| Peak Instantaneous Power (PIP) | 25 kW  |
| 3 dB Beamwidth, E-Plane        | 17° ± 2°   |
| 3 dB Beamwidth, H-Plane        | 90° ± 5°   |
| Impedance                      | 50 Ω   |
| Gain                           | 10.9 dBd (13 dBi)  |
| Port-Port Isolation            | ≥ 27dB   |
| VSWR                           | < 1.5:1  |
| Front-To-Back Ratio            | > 23 dB  |
| Cross Polar Discrimination     | 30 dB  |
| Passive Intermodulation        | -153 dBc (3rd Order, 2 x Tx @ 43 dBm)                    |
| Antistatic Protection          | All metal parts DC-grounded (Connector shows a DC-short) |

| Mechanical                 |   |
|----------------------------|---|
| Connection(s)              | 7/16 DIN(f)<br>Also available with N(f) or 4.3-10(f)                            |
| Housing Material           | Aluminium Alloy, Marine Grade 5083  |
| Radome Material / Colour   | White ASA, UV Resistant   |
| Dimensions                 | 1840 x 400 x 170 mm / 72.44 x 15.75 x 6.69 in.                                  |
| Wind Load                  | 593 N (160 km/h)  |
| Weight                     | Approx. 13 kg / 28.66 lb.   |
| Alternate Mounting Bracket | Tilt bracket : 766.7010 (0 - 12°)<br>766.7020 (0 - 22°)<br>(Ordered Separately) |

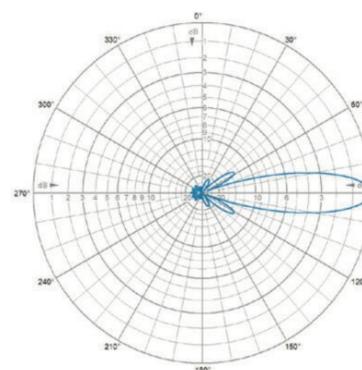
| Environmental               |                  |
|-----------------------------|------------------|
| Operating temperature range | -40 °C to +75 °C |
| Survival Wind Speed         | 270 km/h         |
| Ingress Protection          | IP56             |

### ORDERING

| Model  | Product No.              | Description                          | Frequency     |
|--|--------------------------|--------------------------------------|---------------|
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.00-7/16 DIN(f) | 0° Electrical Tilt                   | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.04-7/16 DIN(f) | 4° Electrical Tilt                   | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.08-7/16 DIN(f) | 8° Electrical Tilt                   | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.10-7/16 DIN(f) | 10° Electrical Tilt                  | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.15-7/16 DIN(f) | 15° Electrical Tilt                  | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | 766.90.13.00-N(f)        | N(f) termination (not PIM specified) | 380 - 470 MHz |
| XPOL panel antenna 90°, 13 dBi               | Contact for availability | 4.3-10(f) termination                | 380 - 470 MHz |
| Accessories                                  |                          |                                      |               |
| Bracket kit for 760/766 panel (no tilt)      | 766.700                  |                                      |               |
| Bracket kit for 760/766 panel (large), 0-12° | 766.7010                 |                                      |               |

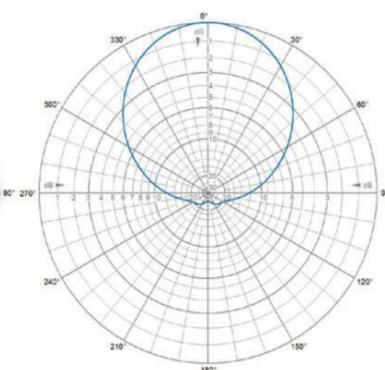
### DIAGRAM

#### RADIATION PATTERNS



E-Plane | 425 MHz

#### RADIATION PATTERNS



H-Plane | 425 MHz

