

UTV-01/UTV-05 UHF PANEL ANTENNA

FEATURES

- horizontal polarization
- broadband 470 ÷ 860 MHz
- 12 dB gain
- directional pattern
- suitable as a component in various arrays



ELECTRICAL DATA

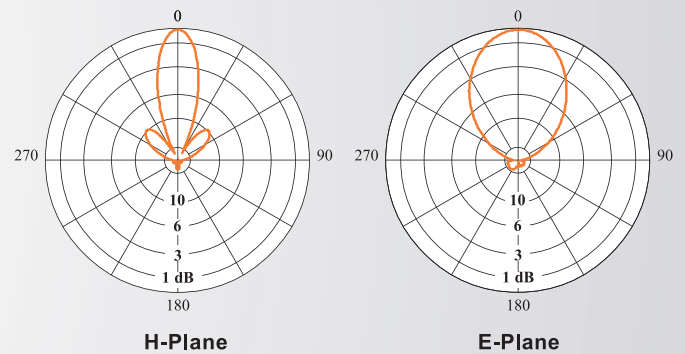
| ANTENNA TYPE | UTV-01 | UTV-05 |
|-------------------------------------|--|--------------|
| FREQUENCY RANGE | 470 ÷ 860 MHz | |
| IMPEDANCE | 50 ohm | |
| CONNECTOR | 7/16 F 90° or 7/8" EIA 90° | 2 x 7/8" EIA |
| MAX POWER | 1.5 kW (7/16 F 90°) 2.5 kW (7/8" EIA 90°) | 2 x 2.5 kW |
| VSWR | ≤ 1.1 | ≤ 1.1 |
| POLARIZATION | Horizontal | |
| GAIN (referred to half wave dipole) | 12 dB | |
| HALF POWER BEAMWIDTH | E-Plane ± 32° H-Plane ± 12° | |
| LIGHTNING PROTECTION | All metal parts DC grounded | |

Other models available:
 UTV-01/E white radome only
 UTV-01/EE white radome only, 7/16 straight Input connector or NF
 UTV-01/P 5kW 1-5/8" EIA 90° Input connector
 UTV-05/D 2x7/8" EIA straight Input connector only

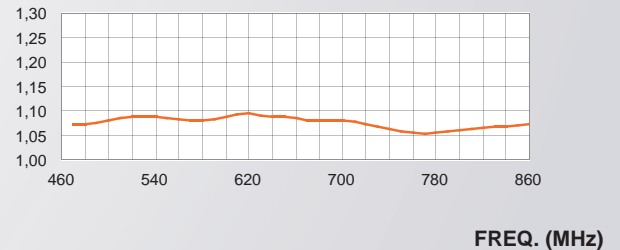
MECHANICAL DATA

| | |
|------------------------|---|
| DIMENSIONS | 1000 x 450 x 280 mm (7/8" EIA 90°) |
| WEIGHT | 14.5 kg |
| WIND SURFACE | 0.45 m ² |
| WIND LOAD (at 160km/h) | 0.71 kN |
| MAX WIND VELOCITY | 220 km/h |
| MATERIALS | Brass, aluminium, stainless steel, teflon, fiberglass (radome) |
| ICING PROTECTION | Full radome |
| RADOME COLOUR | Orange - Green - White (standard) |
| MOUNTING | Directly on supporting mast or with special pipe clamps |

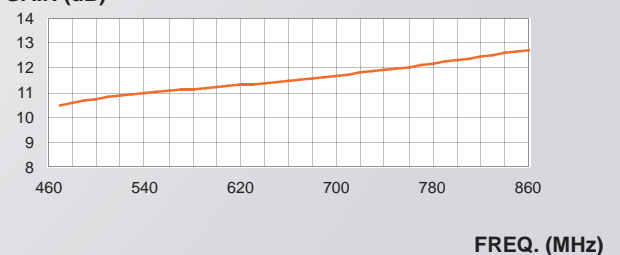
RADIATION PATTERNS (Mid Band)



VSWR



GAIN (dB)

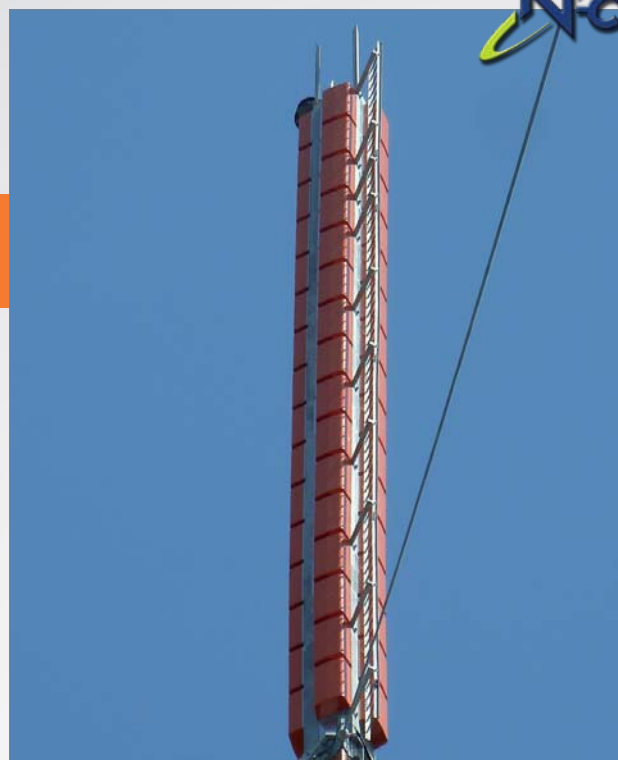


UTV-01/UTV-05

UHF PANEL ANTENNA

FEATURES

- radiating systems with UTV-01/UTV-05 panels
- very high power systems
- omnidirectional or directional patterns
- equal or unequal split ratio power distribution network



UTV-01/64
HALIFAX, CANADA

ELECTRICAL DATA

| | |
|--------------------|--|
| FREQUENCY RANGE | 470 ÷ 860 MHz |
| IMPEDANCE | 50 ohm |
| CONNECTOR | EIA flange according to system power rating |
| POWER RATING | The antenna system can accept any power according to requirements |
| VSWR | ≤ 1.05 in the operating channels |
| POLARIZATION | Horizontal |
| GAIN | Refer to table |
| HORIZONTAL PATTERN | Any type according to requirement |
| VERTICAL PATTERN | Null fill, beam tilt and special requirements to order |
| OTHER FEATURES | The antenna system can be supplied in split feed configuration (two equal halves). Each half can accept full power. |

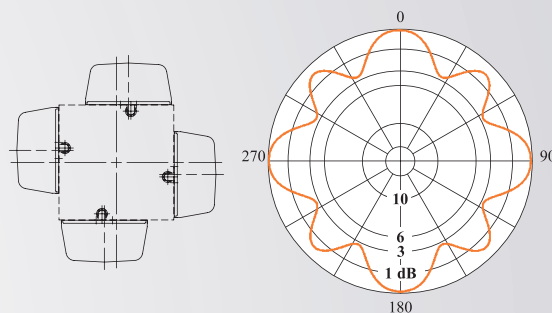
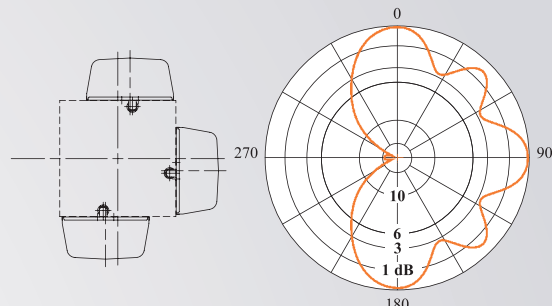
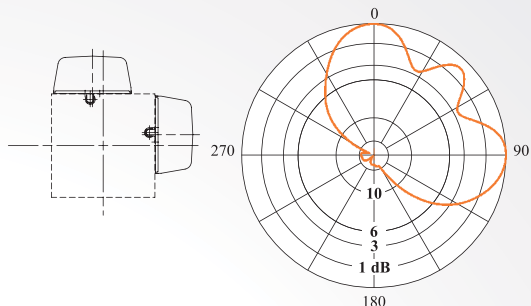
MECHANICAL DATA

| | |
|-------------------|---------------------------|
| HEIGHT OF ARRAY | Subject to number of bays |
| TOTAL NET WEIGHT | Refer to table |
| WIND LOAD | Refer to table |
| PRESSURIZABLE | Yes |
| MOUNTING HARDWARE | Available upon request |

UTV-01/UTV-05

UHF PANEL ANTENNA

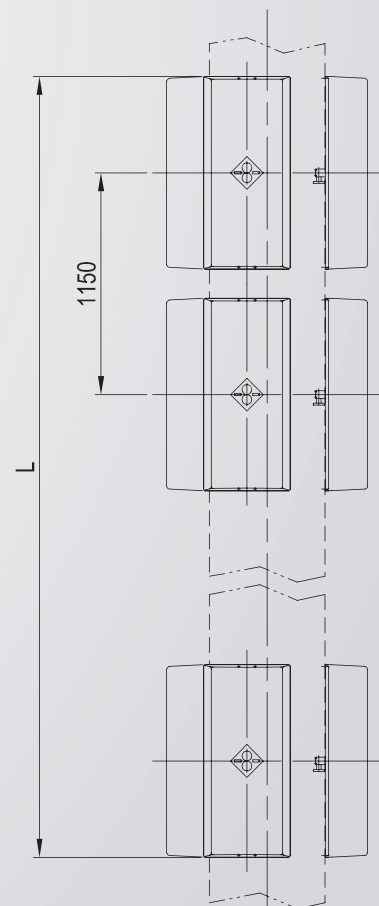
HORIZONTAL PATTERNS WITH OFFSET 2,3 AND 4 FACES AT 650 MHz



TECHNICAL DATA

| NUMBER OF BAYS | PANELS PER BAY | GAIN dB (1) | GAIN TIMES (1) | WEIGHT kg (2) | ANTENNA HEIGHT L M | WIND LOAD (3) KN | WIND LOAD (4) KN |
|----------------|----------------|-------------|----------------|---------------|--------------------|------------------|------------------|
| 2 | 1 | 15.1 | 32.4 | 38 | 2.15 | 1.98 | 5.67 |
| | 2 | 12.2 | 16.6 | 84 | | 4.35 | 8.03 |
| | 3 | 10.3 | 10.7 | 122 | | 5.38 | 9.07 |
| | 4 | 9.1 | 8.2 | 168 | | 5.23 | 8.92 |
| 4 | 1 | 18.3 | 67.6 | 84 | 4.45 | 4.08 | 7.77 |
| | 2 | 15.3 | 34 | 168 | | 8.99 | 12.67 |
| | 3 | 13.5 | 22.4 | 281 | | 10.68 | 14.37 |
| | 4 | 12.3 | 17 | 400 | | 10.38 | 14.06 |
| 6 | 1 | 20 | 100 | 122 | 6.75 | 6.29 | 9.98 |
| | 2 | 17 | 50.1 | 281 | | 13.65 | 17.34 |
| | 3 | 15.3 | 34 | 378 | | 16.17 | 19.85 |
| | 4 | 14 | 25.2 | 432 | | 15.71 | 19.40 |
| 8 | 1 | 21.3 | 134.8 | 168 | 9.05 | 8.32 | 12.00 |
| | 2 | 18.3 | 67.6 | 400 | | 18.27 | 21.96 |
| | 3 | 16.6 | 45.7 | 432 | | 21.67 | 25.36 |
| | 4 | 15.3 | 34 | 583 | | 21.05 | 24.74 |
| 10 | 1 | 22.3 | 169.8 | 224 | 11.35 | 10.42 | 14.11 |
| | 2 | 19.3 | 85.1 | 418 | | 21.09 | 24.78 |
| | 3 | 17.6 | 57.5 | 672 | | 27.15 | 30.83 |
| | 4 | 16.3 | 42.6 | 896 | | 26.36 | 30.05 |
| 12 | 1 | 23 | 199.5 | 281 | 13.65 | 12.55 | 16.24 |
| | 2 | 20.1 | 102.3 | 432 | | 27.55 | 31.23 |
| | 3 | 18.3 | 67.6 | 843 | | 31.97 | 35.66 |
| | 4 | 17.1 | 51.2 | 992 | | 32.09 | 35.77 |
| 16 | 1 | 24.3 | 269.2 | 400 | 18.25 | 16.76 | 20.45 |
| | 2 | 21.3 | 134.8 | 583 | | 36.78 | 40.47 |
| | 3 | 19.6 | 91.2 | 992 | | 43.14 | 46.83 |
| | 4 | 18.4 | 69.2 | 1263 | | 44.17 | 47.85 |

- UP -



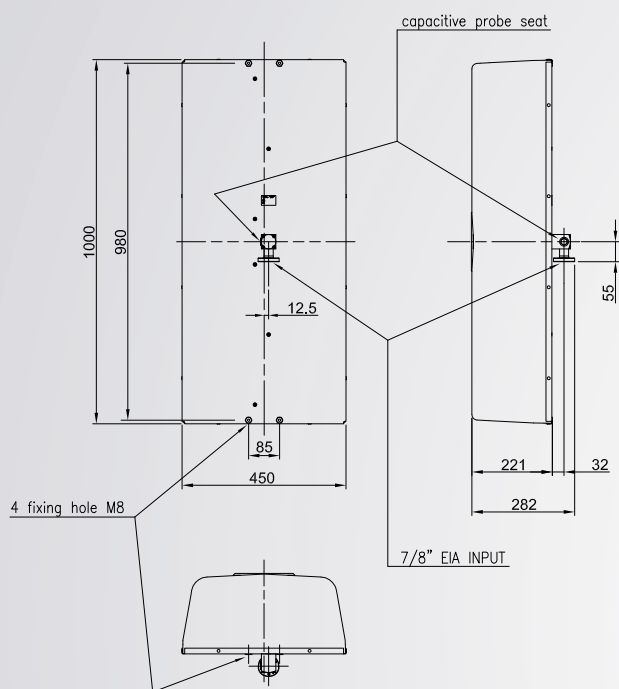
(1) referred to half wave dipole. Losses of power distribution network not included.
 (2) without mounting hardware, (for UTV-01).
 (3) Without top mast, v= 160 km/h (4) With top mast, v= 160 km/h

UTV-01/UTV-05

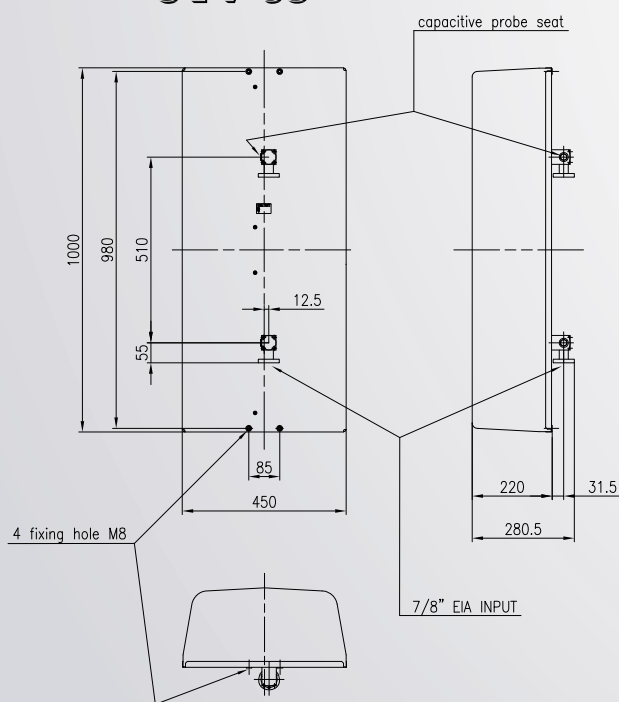
UHF PANEL ANTENNA

DIMENSIONAL DETAILS

UTV-01



UTV-05



VERTICAL PATTERN

— Without null fill
 — With null fill and beam tilt

