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

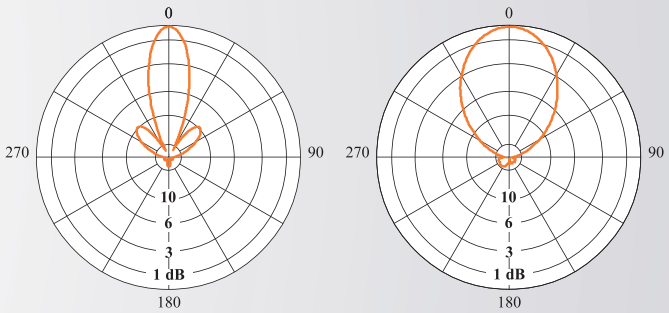
ANTENNA TYPE	UTV-01	UTV-05
FREQUENCY RANGE	470 ÷ 860 MHz	
IMPEDANCE	50 ohm	
CONNECTOR	7/16 F 90° or 7/8" EIA 90°	2 x 7/8" EIA
MAX POWER	1.5 kW (7/16 F 90°) 2.5 kW (7/8" EIA 90°)	2 x 2.5 kW
VSWR	≤ 1.1	≤ 1.1
POLARIZATION	Horizontal	
GAIN (referred to half wave dipole)	12 dB	
HALF POWER BEAMWIDTH	E-Plane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

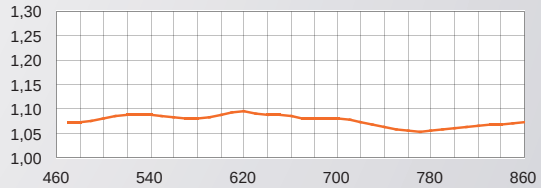
DIMENSIONS	1000 x 450 x 280 mm (7/8" EIA 90°)
WEIGHT	14.5 kg
WIND SURFACE	0.45 m²
WIND LOAD (at 160km/h)	0.71 kN
MAX WIND VELOCITY	220 km/h
MATERIALS	Brass, aluminium, stainless steel, teflon, fiberglass (radome)
ICING PROTECTION	Full radome
RADOME COLOUR	Orange - Green - White (standard)
MOUNTING	Directly on supporting mast or with special pipe clamps

RADIATION PATTERNS (Mid Band)



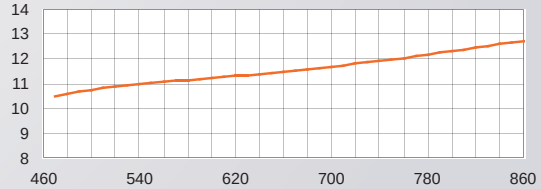
H-Plane E-Plane

VSWR



FREQ. (MHz)

GAIN (dB)



FREQ. (MHz)

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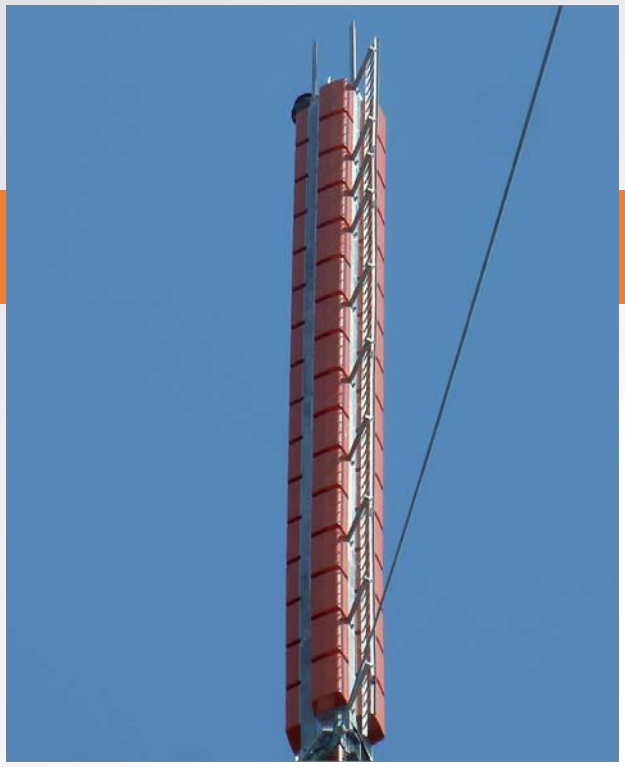


UTV-01/64
HALIFAX, CANADA

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

ELECTRICAL DATA

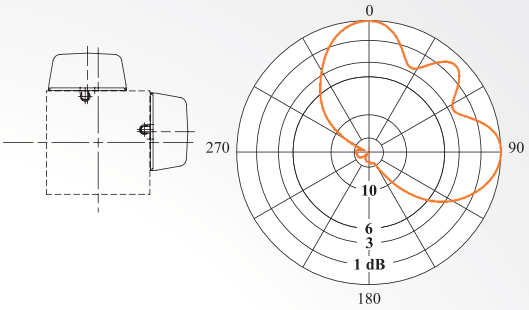
FREQUENCY RANGE	470 ÷ 860 MHz
IMPEDANCE	50 ohm
CONNECTOR	EIA flange according to system power rating
POWER RATING	The antenna system can accept any power according to requirements
VSWR	≤ 1.05 in the operating channels
POLARIZATION	Horizontal
GAIN	Refer to table
HORIZONTAL PATTERN	Any type according to 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.

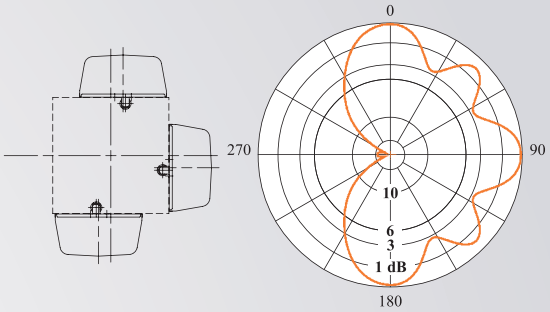
MECHANICAL DATA

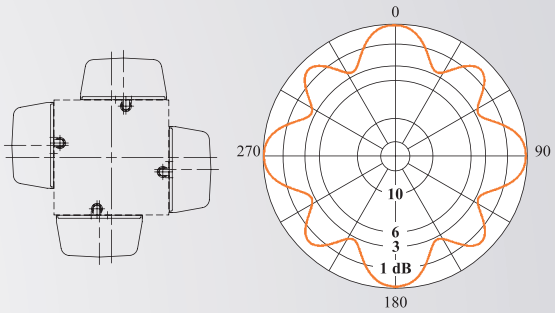
HEIGHT OF ARRAY	Subject to number of bays
TOTAL NET WEIGHT	Refer to table
WIND LOAD	Refer to table
PRESSURIZZABLE	Yes
MOUNTING HARDWARE	Available upon request

UTV-01/UTV-05
UHF PANEL ANTENNA

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



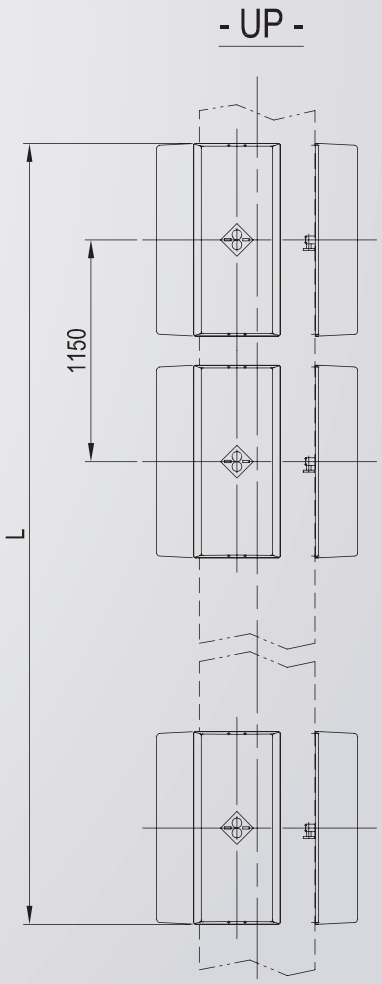




TECHNICAL DATA

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

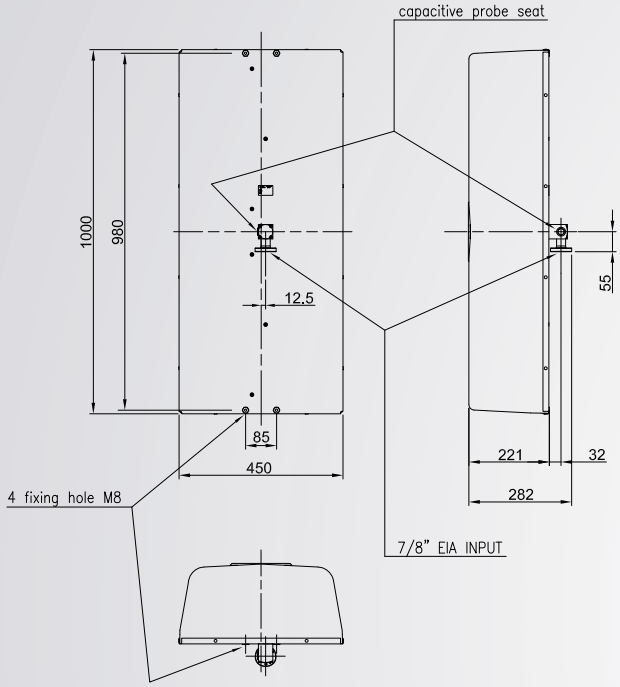
(1) referred to half wave dipole. Losses of power distribution network not included.
(2) without mounting hardware,(for UTV-01).
(3) Without top mast, v= 160 km/h (4) With top mast, v= 160 km/h



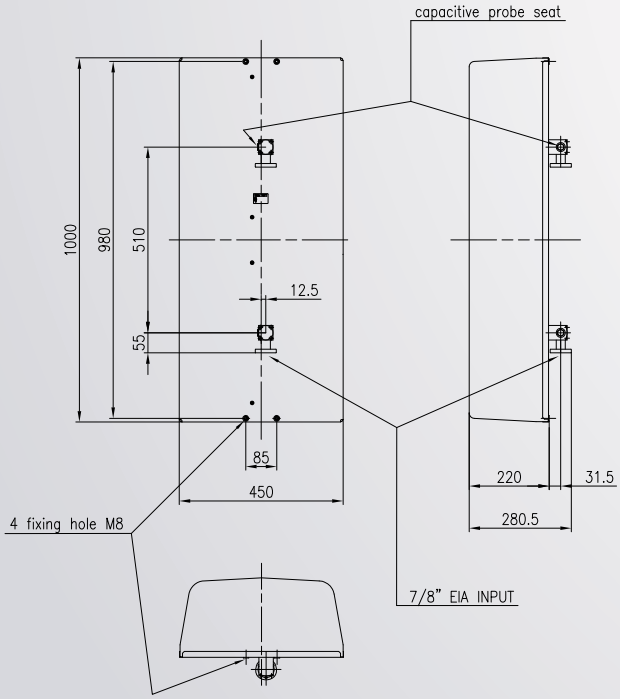
UTV-01/UTV-05
UHF PANEL ANTENNA

DIMENSIONAL DETAILS

UTV-01



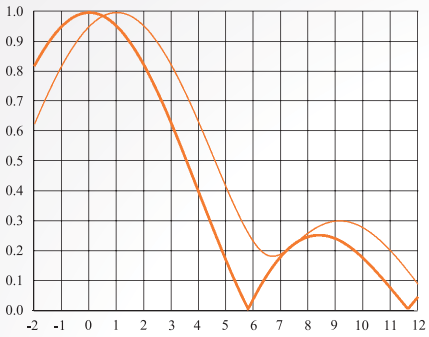
UTV-05



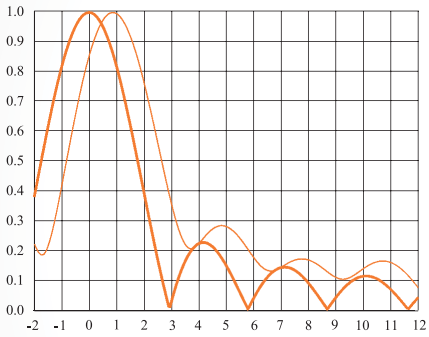
VERTICAL PATTERN

Without null fill

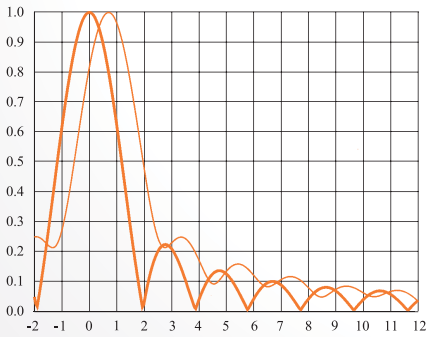
With null fill and beam tilt



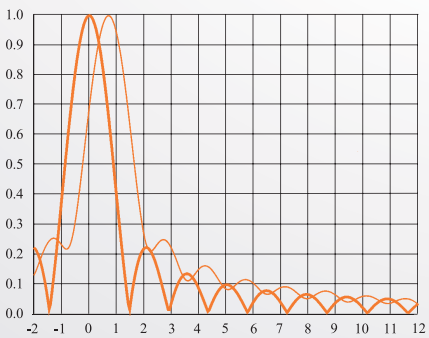
4 BAYS



8 BAYS



12 BAYS



16 BAYS