

UHF panel transmitting antennas

Kvant-Efir offers a wide range of panel antennas.

The most popular ones are those on the basis of UTV-01 panels. The antennas are mounted onto a bearing (cross-section from 500 x 500 mm to 640 x 640 mm) and operate at temperature from -40 to +45°C. Besides UTV-01 panels the antenna system includes: power splitters, a set of cables with holders and a tower bearing (optional).

Technical specifications of antenna system

Frequency range	470–860 MHz
VSWR	≤ 1,1
Polarization	horizontal
Input impedance	50 or 75 Ohm
Input connector	on request, depends on antenna system power

Number of bays	Number of panels per bay	Maximum power, kW	Gain (relative to isotropic radiator)		Weight (without bearing), kg	Height, m	Wind load (V=150 kph), kg
			dB	times			
1	1	2,5	14	25	16	1	64
	2	4	11,2	13,2	40		96
	3	5	9,5	8,9	55		127
	4	5-8	8,2	6,6	70		144
2	2	5	14,5	28,2	75	2,15	192
	3	8-10	12,6	18,2	110		253
	4	8-10	11,4	13,8	140		288
4	2	8-10	17,6	57,5	140	4,45	384
	3	8-10	15,8	38	210		506
	4	8-15	14,6	28,8	260		577
6	2	8-10	19,3	85	210	6,75	576
	3	10-20	17,6	57,5	300		760
	4	10-40	16,3	42,7	400		866

UHF panel transmitting antennas

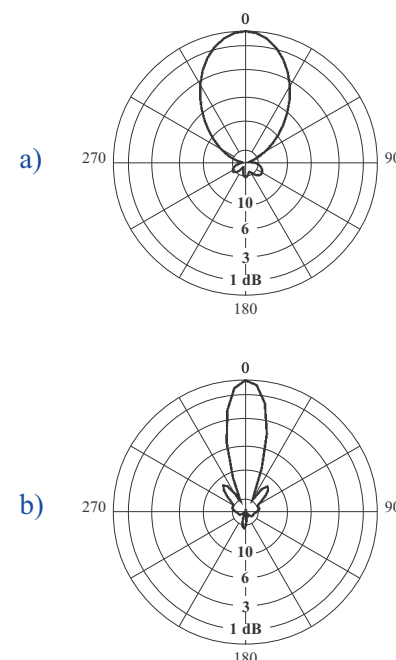
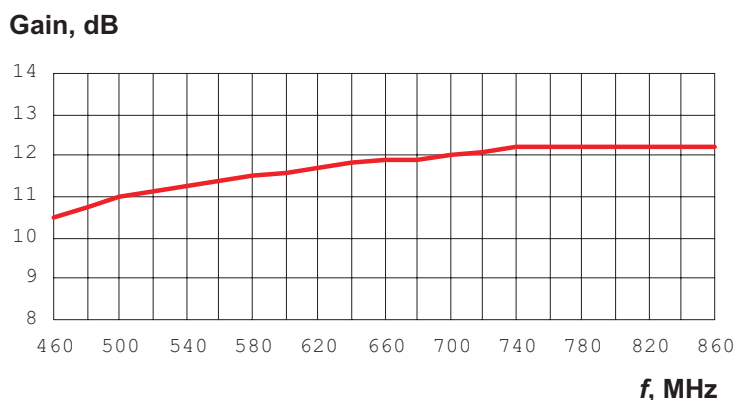
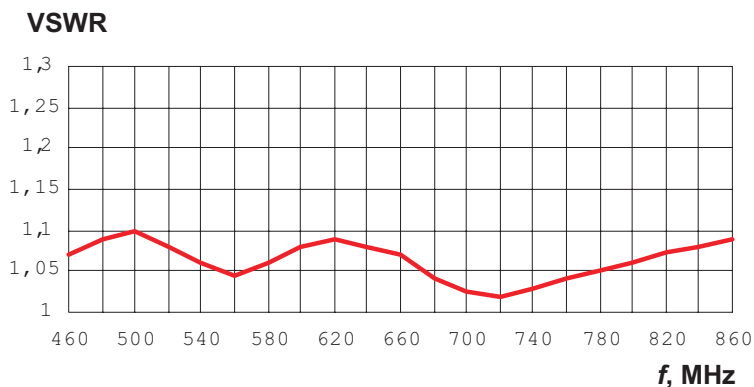
UTV-01 UHF panel antenna

Technical specifications of UTV-01

Frequency range	470–860 MHz
VSWR	$\leq 1,1$
Connector	7/8"
Maximum power	2,5 kW
Polarization	horizontal
Gain (referred to half wave dipole)	12 dB
Input impedance	50 Ohm
Half power beamwidth	E-Plane: $\pm 32^\circ$ H-Plane: $\pm 12^\circ$
Dimensions	1000 x 450 x 280 mm
Weight	15,4 kg
Wind load	150 km/h
Maximum wind velocity	220 km/h
Material	stainless steel (reflector) plated brass and copper (internal parts) fiberglass (radome)



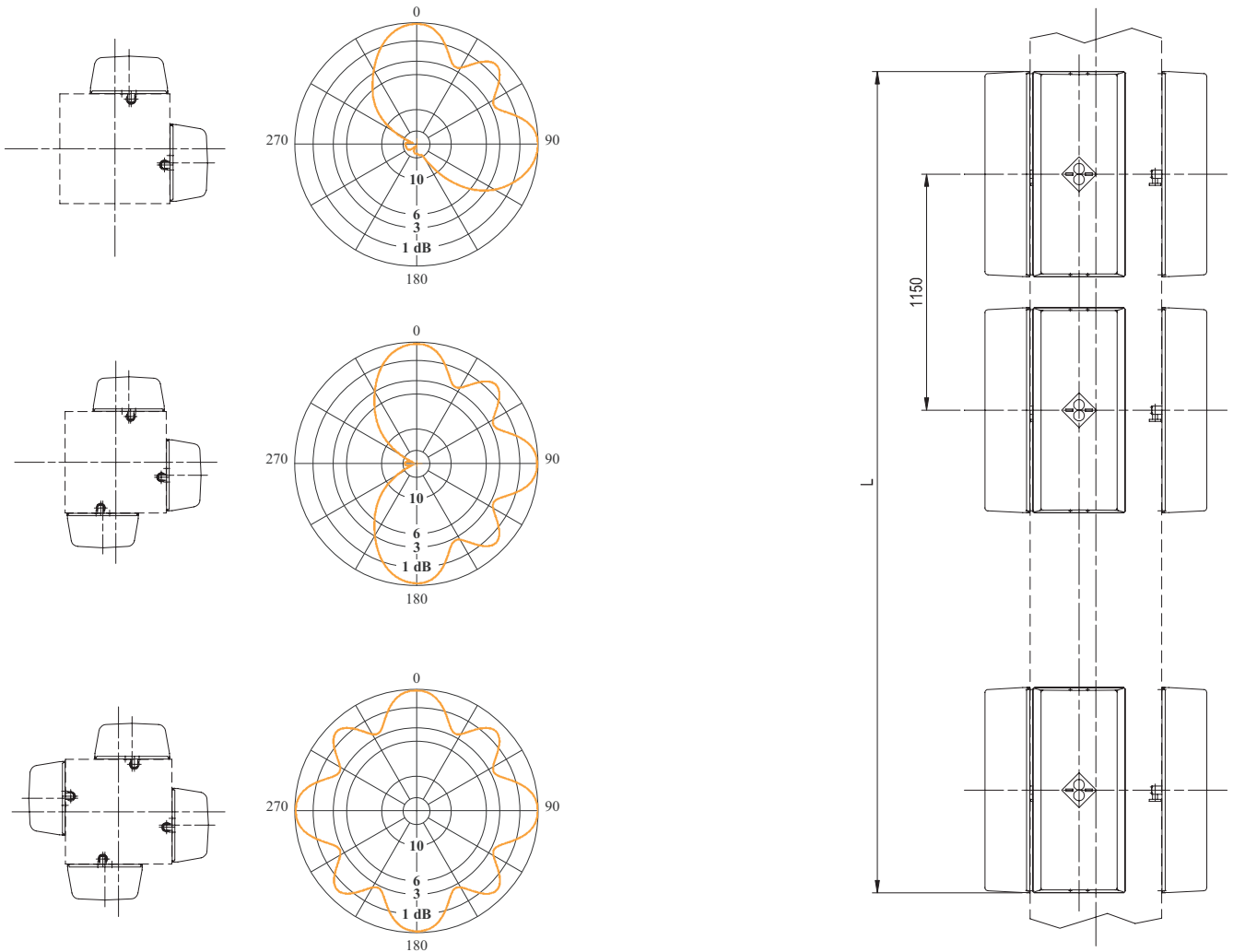
UTV-01
panel antenna



Patterns:
a) - E-Plane;
b) - H-Plane.

UHF panel transmitting antennas

Antenna systems on the basis of UTV-01 panel antenna



Horizontal patterns with offset 2,3 and 4 faces at 650 MHz