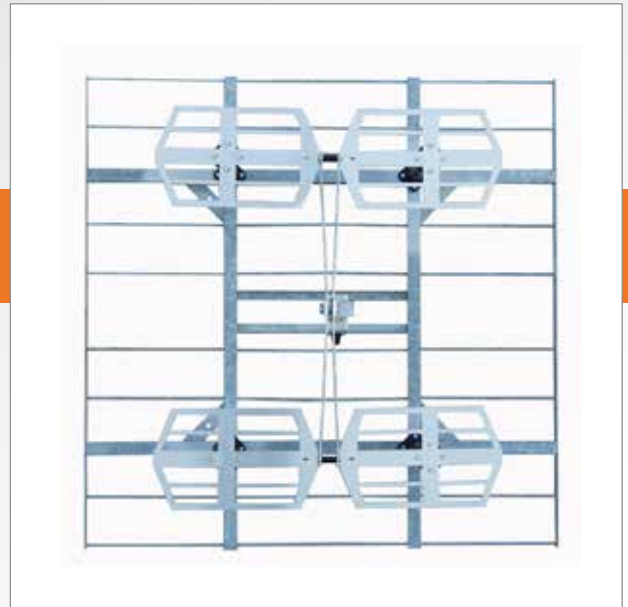


3VTV-02/ES (Horizontal polarization) VHF PANEL ANTENNA

FEATURES

- horizontal polarization
- broadband 174 ÷ 240 MHz
- 8 dB gain
- directional pattern
- suitable as a component in various arrays
- suitable also for vertical polarization



ELECTRICAL DATA

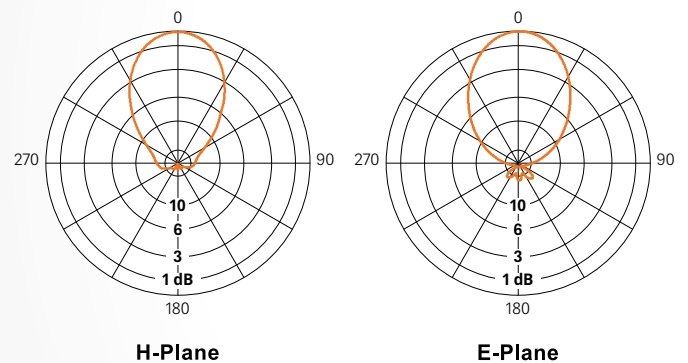
ANTENNA TYPE	3VTV-02/ES
FREQUENCY RANGE	174 ÷ 240 MHz
IMPEDANCE	50 ohm
CONNECTOR	7/8" EIA
MAX POWER	3 kW
VSWR	≤ 1.1 (174 ÷ 230 MHz) ≤ 1.2 (up to 240 MHz)*
POLARIZATION	Horizontal
GAIN (referred to half wave dipole)	8 dB
HALF POWER BEAMWIDTH	E-Plane ± 32° H-Plane ± 30°
LIGHTNING PROTECTION	All Metal Parts DC Grounded

* on request

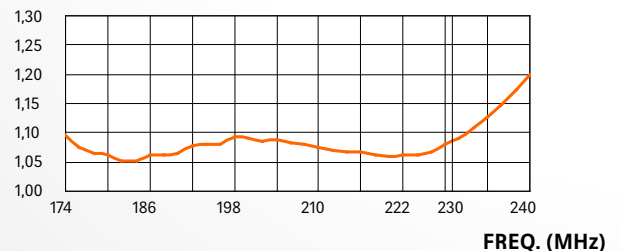
MECHANICAL DATA

DIMENSIONS mm (in)	1300 x 1300 x 513 (51.2 x 51.2 x 20.2)
WEIGHT kg (lb)	27 (60)
WIND SURFACE m ² (ft ²)	0.75 (8.1) front 0.43 (4.6) side
WIND LOAD kN (lbf)	0.93 (209) front 0.53 (119) side
MAX WIND VELOCITY km/h (mph)	220 (136.7)
MATERIALS	Reflector (hot dip galvanized steel) Dipole (stainless steel) Internal parts (silver plated brass, deoxidized aluminium)
MOUNTING	Directly on supporting mast or tower

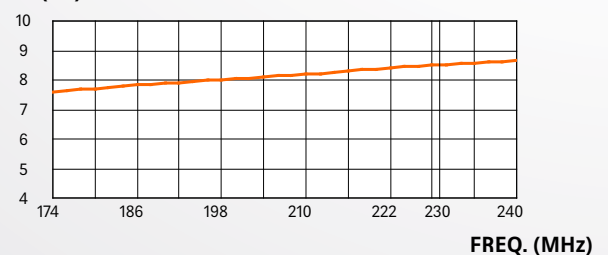
RADIATION PATTERNS (Mid Band)



VSWR

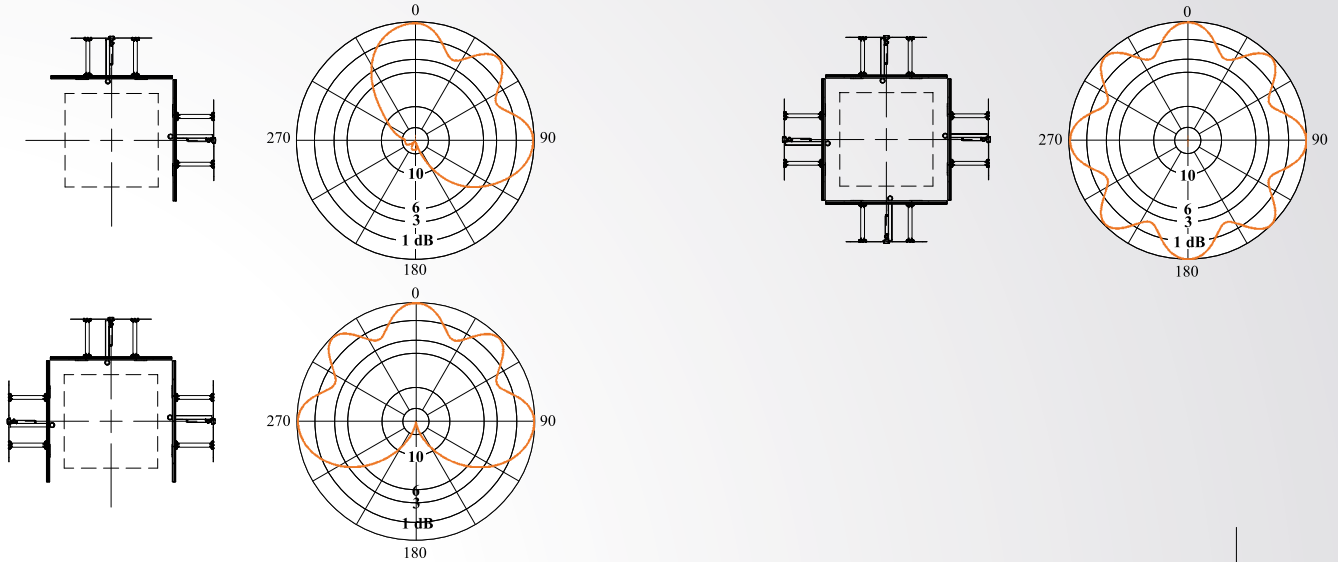


GAIN (dB)



3VTV-02/ES (Horizontal polarization) VHF PANEL ANTENNA

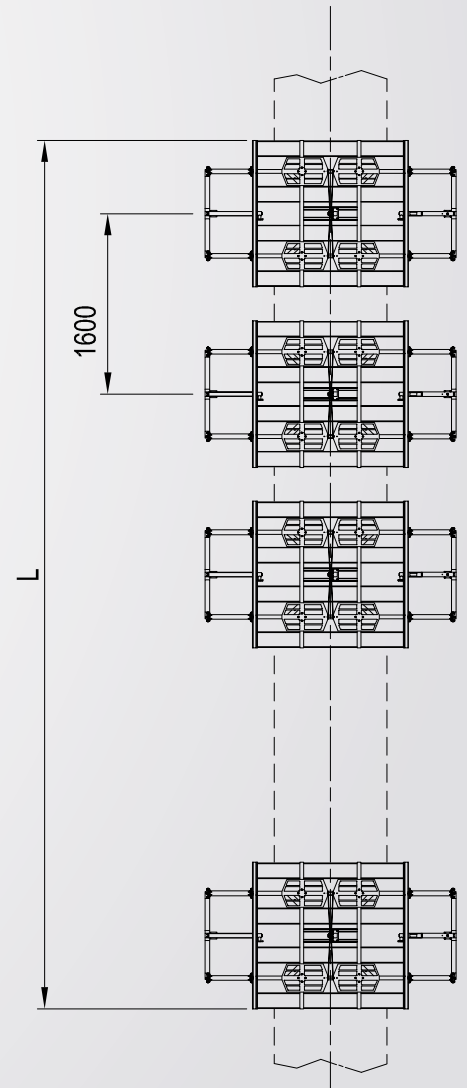
HORIZONTAL PATTERNS WITH 2, 3 AND 4 FACES AT 202 MHz



TECHNICAL DATA

NUMBER OF BAYS	PANELS PER BAY	GAIN dB (1)	GAIN TIMES (1)	WEIGHT (2) kg (lb)	ANTENNA HEIGHT L m (ft)	WIND LOAD (3) kN (lbf)
2	1	11	12.6	66 (146)		1.85 (416)
	2	8	6.3	127 (280)	2.9	3.12 (701)
	3	6.2	4.2	188 (414)	(9.5)	4.10 (922)
	4	5	3.2	254 (560)		5.0 (1124)
4	1	14	25.1	127 (280)		3.7 (832)
	2	11	12.6	254 (560)	6.1	6.2 (1394)
	3	9.2	8.3	396 (873)	(20)	8.17 (1837)
	4	8	6.3	578 (1274)		10 (2248)
6	1	15.9	38.9	188 (414)		5.57 (1252)
	2	12.9	19.5	396 (873)	9.3	9.42 (2118)
	3	11.1	12.8	654 (1442)	(30.5)	12.25 (2754)
	4	9.9	9.8	812 (1790)		16.18 (3637)
8	1	17	50.1	254 (560)		7.43 (1670)
	2	14	25.1	578 (1274)	12.5	12.57 (2826)
	3	12.2	16.6	812 (1790)	(41)	16.34 (3673)
	4	11	12.6	1050 (2315)		20.1 (4519)
12	1	18.9	77.6	396 (873)		11.15 (2507)
	2	15.9	38.9	812 (1790)	18.9	18.9 (4249)
	3	14.1	25.7	1310 (2888)	(62)	24.5 (5508)
	4	12.9	19.5	1625 (3582)		30.1 (6767)
16	1	20	100	578 (1274)		14.9 (3350)
	2	17	50.1	1050 (2315)	25.3	25.1 (5643)
	3	15.2	33.1	1625 (3582)	(83)	32.65 (7340)
	4	14	25.1	2100 (4630)		45.96 (10332)

(1) referred to half wave dipole. Losses of power distribution network not included.
 (2) without mounting hardware.
 (3) v= 160 km/h (100 mph).



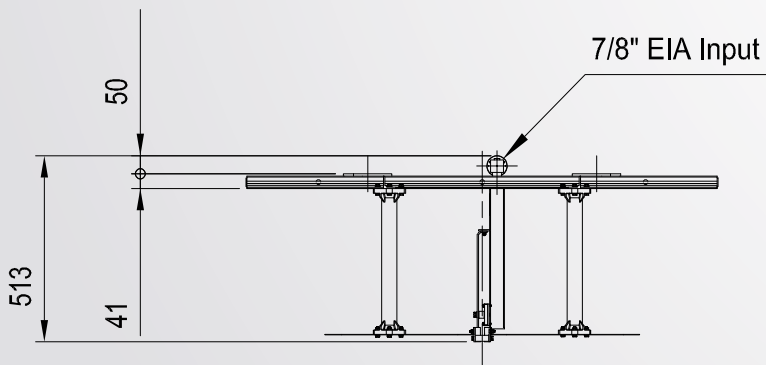
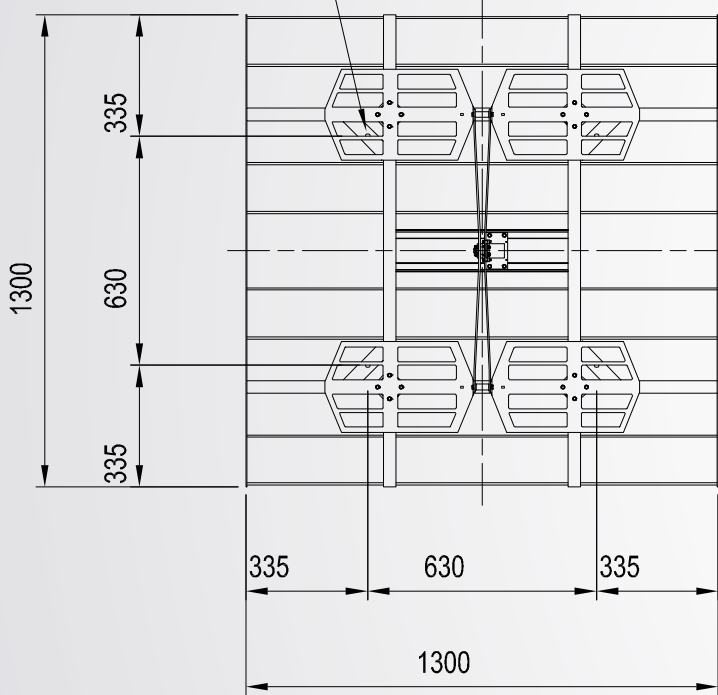
3VTV-02/ES (Horizontal polarization) VHF PANEL ANTENNA

DIMENSIONAL DETAILS

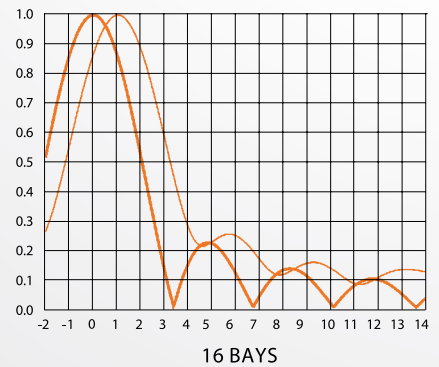
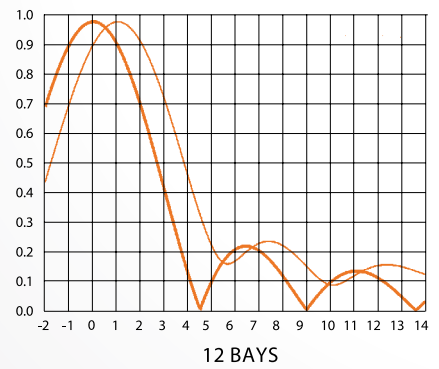
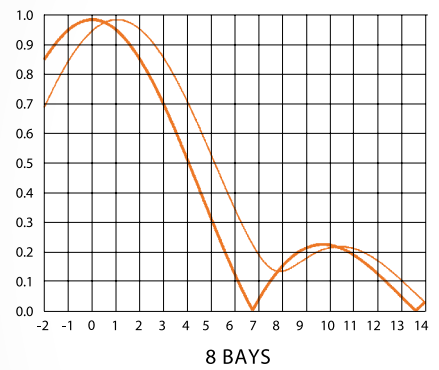
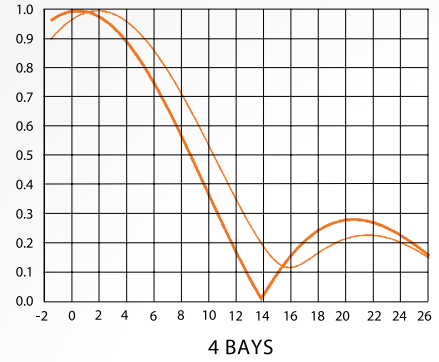
VERTICAL PATTERN

14mm dia. Fixing holes (4)
0.55" dia. Fixing holes (4)

- UP -



— Without null fill
— With null fill and beam tilt



All dimensions are in millimeters