

General data of Antenna System

TX station	12xAkk2-90
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKK_2V PANEL W.B. FM vertical pol.
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	200.0
Mast cross section (T/Q/C)	Q
Structure rotation w.r.t. North (°)	315.0
Mast rotation w.r.t. North (°)	0.0

Information about antennas used in the System

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKK_2V PANEL W.B. F
Band start(MHz)	88
Band stop(MHz)	105
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	310
Height (cm)	174
Width (cm)	248
Thickness (cm)	80
Weight (Kg)	45
Maximum power (KW)	5
Gain (dBd)	8.1
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	0
R.C.Phase (°)	0

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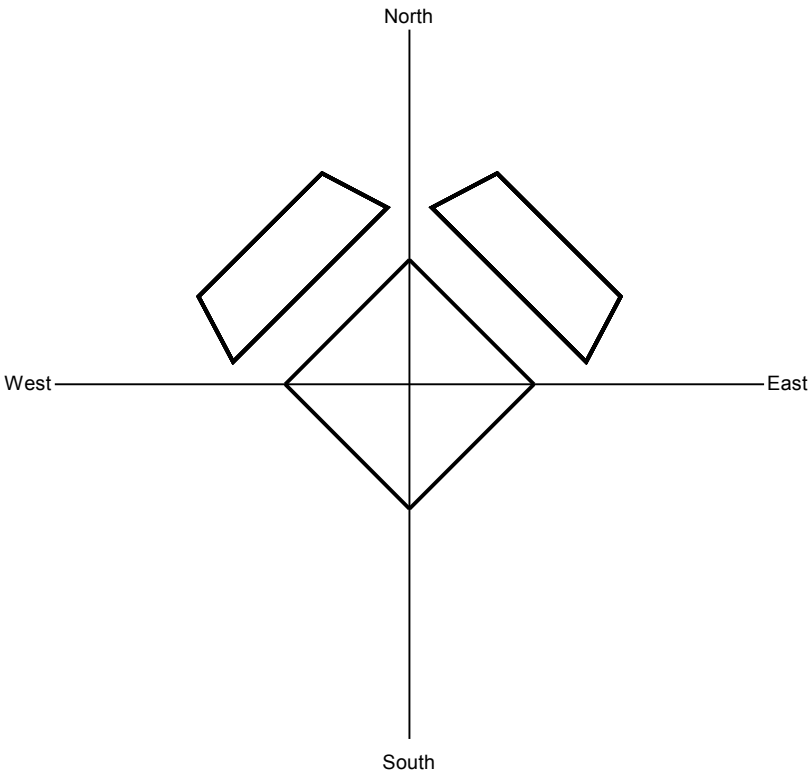
Geometr. and electrical data of Antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)		<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	8.333	0	0	0	+0.0	7.00	160.0	0.0	1	1	0.0	0.0
2	8.333	0	0	0	+0.0	4.20	160.0	0.0	1	1	0.0	0.0
3	8.333	0	0	0	+0.0	1.40	160.0	0.0	1	1	0.0	0.0
4	8.333	0	0	0	+0.0	-1.40	160.0	0.0	1	1	0.0	0.0
5	8.333	0	0	0	+0.0	-4.20	160.0	0.0	1	1	0.0	0.0
6	8.333	0	0	0	+0.0	-7.00	160.0	0.0	1	1	0.0	0.0
7	8.333	0	90	0	+0.0	7.00	160.0	90.0	1	1	0.0	0.0
8	8.333	0	90	0	+0.0	4.20	160.0	90.0	1	1	0.0	0.0
9	8.333	0	90	0	+0.0	1.40	160.0	90.0	1	1	0.0	0.0
10	8.333	0	90	0	+0.0	-1.40	160.0	90.0	1	1	0.0	0.0
11	8.333	0	90	0	+0.0	-4.20	160.0	90.0	1	1	0.0	0.0
12	8.333	0	90	0	+0.0	-7.00	160.0	90.0	1	1	0.0	0.0

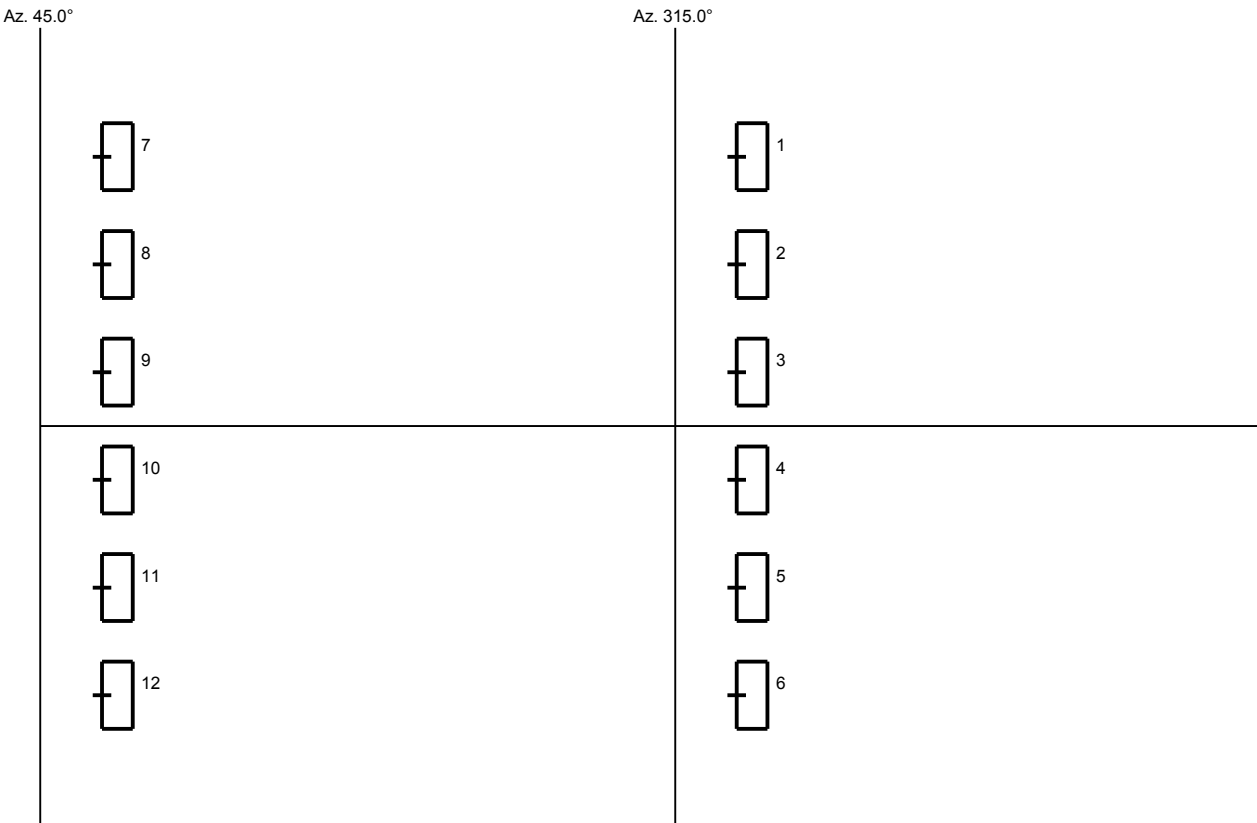
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Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	45	315
B. Number of antennas	6	6
C. Nominal power supply (W)	500.00	500.00
D. Losses (addit. + cables) (dB)	0.0	0.0
E. Effective power supply (W)	500.00	500.00
F. Theor. maximum gain (dBd)	15.89	15.89
G. Distribution losses (dB)	0.00	0.00
H. Nominal max gain [F - G] (dBd)	15.89	15.89
I. Compensation losses (dB)	0.00	0.00
J. Effec. max gain [H - I] (dBd)	15.89	15.89
K. Effec. max gain (times)	38.81	38.81
L. Effec. max power [E * K] (KW)	19.4044	19.4044
M. Max power depr. angle (°)	0.0	0.0
N. Max power az. angle (°)	43	313

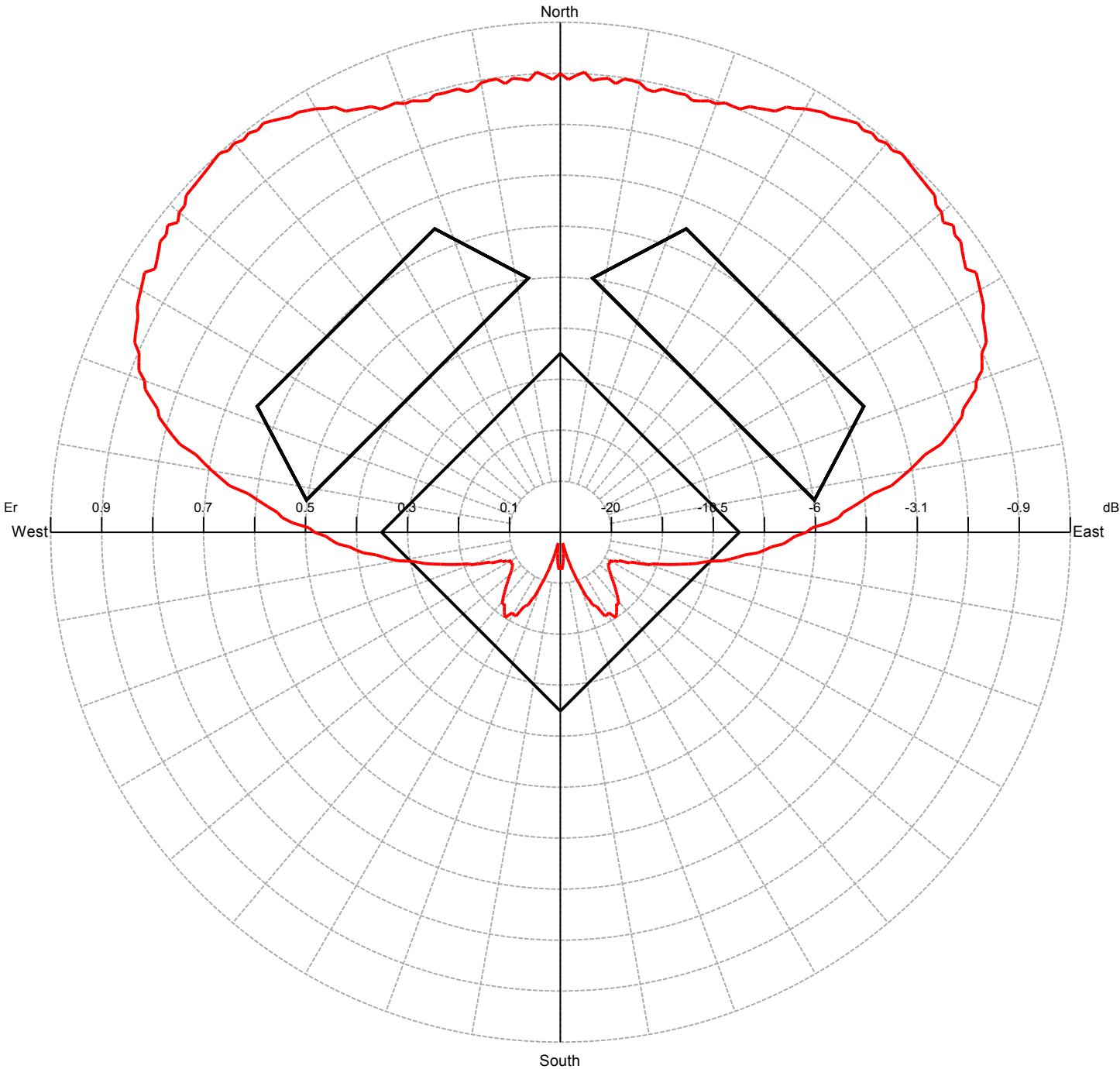
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	11.2	90	5.7	180	-7.1	270	5.7
10	11.1	100	2.3	190	-7.1	280	8.9
20	11.1	110	-2.5	200	-7.1	290	10.8
30	11.7	120	-7.0	210	-2.6	300	11.6
40	12.0	130	-5.7	220	-3.0	310	11.9
50	11.9	140	-3.0	230	-5.7	320	12.0
60	11.6	150	-2.6	240	-7.0	330	11.7
70	10.8	160	-7.1	250	-2.5	340	11.1
80	8.9	170	-7.1	260	2.3	350	11.1

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Horizontal diagram at 0.0° depres. (Total Antenna)

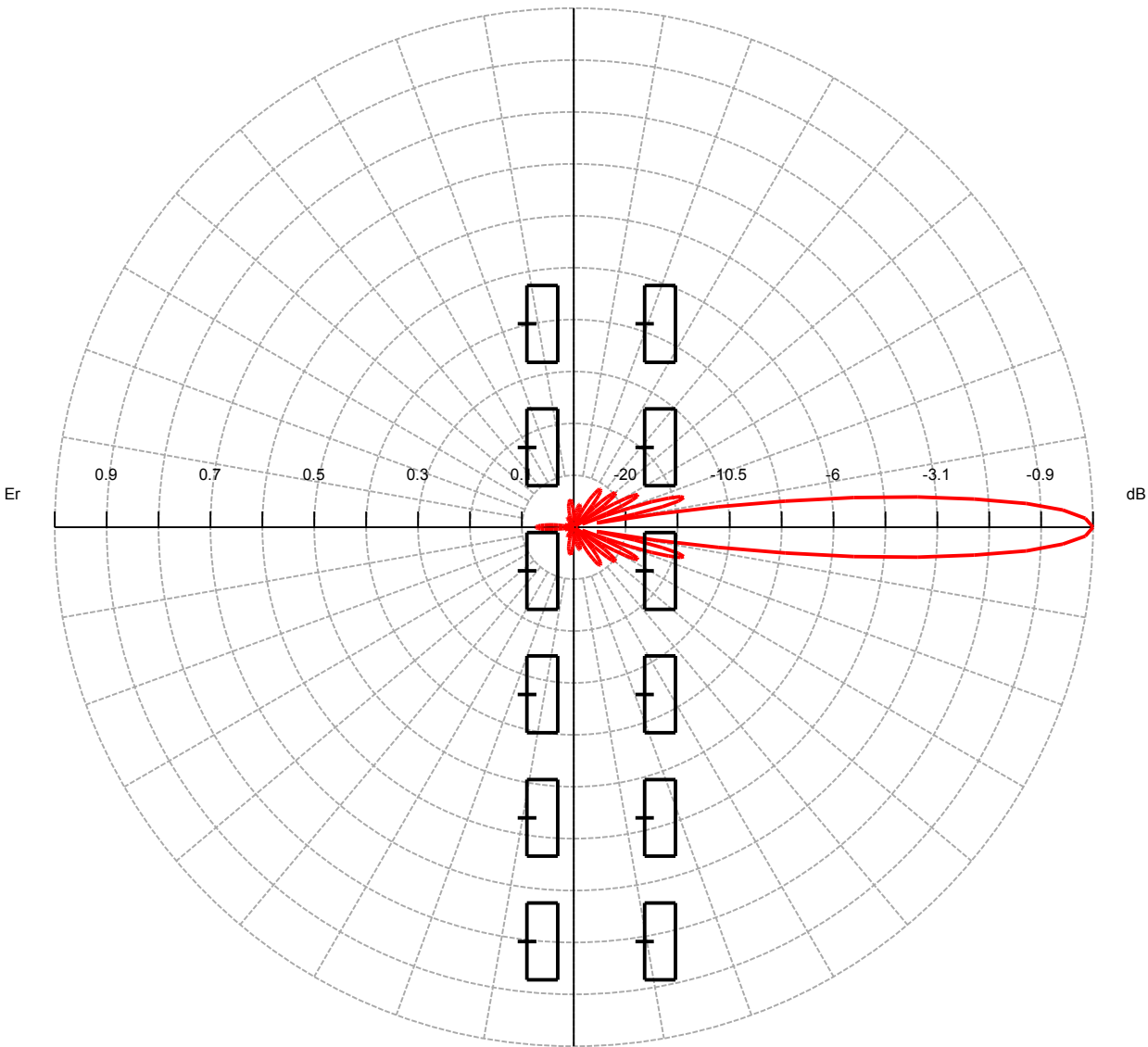


0.0° depres. (Total Antenna), Gain (dBd): 12.08 ERP T.Max(KW): 16.1267 ERP E.Max(KW): 16.1267

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 11.16

ERP T.Max(KW): 13.0475 ERP E.Max(KW): 13.0475