

TX station: 1+1 AkI5-90°

Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

TX station	1+1 AkI5-90°
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-AKL_5 LOG 5 ELEM. FM WB
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):	10.0
Mast cross section (T/Q/C)	C
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

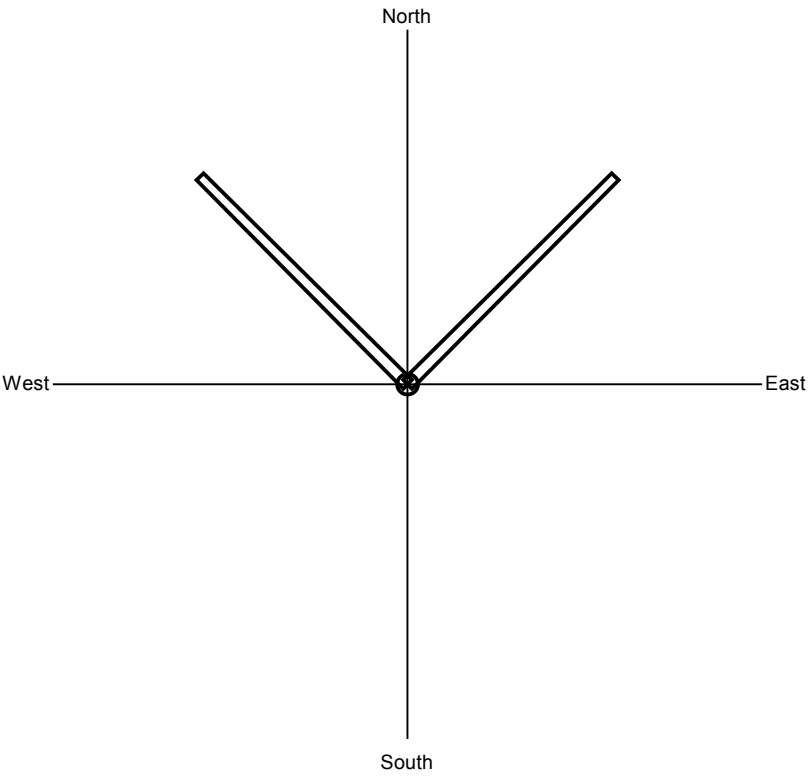
Information about antennas used in the System

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKL_5 LOG 5 ELEM.
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	173
Width (cm)	6
Thickness (cm)	143
Weight (Kg)	4.5
Maximum power (KW)	2
Gain (dBd)	6.2
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

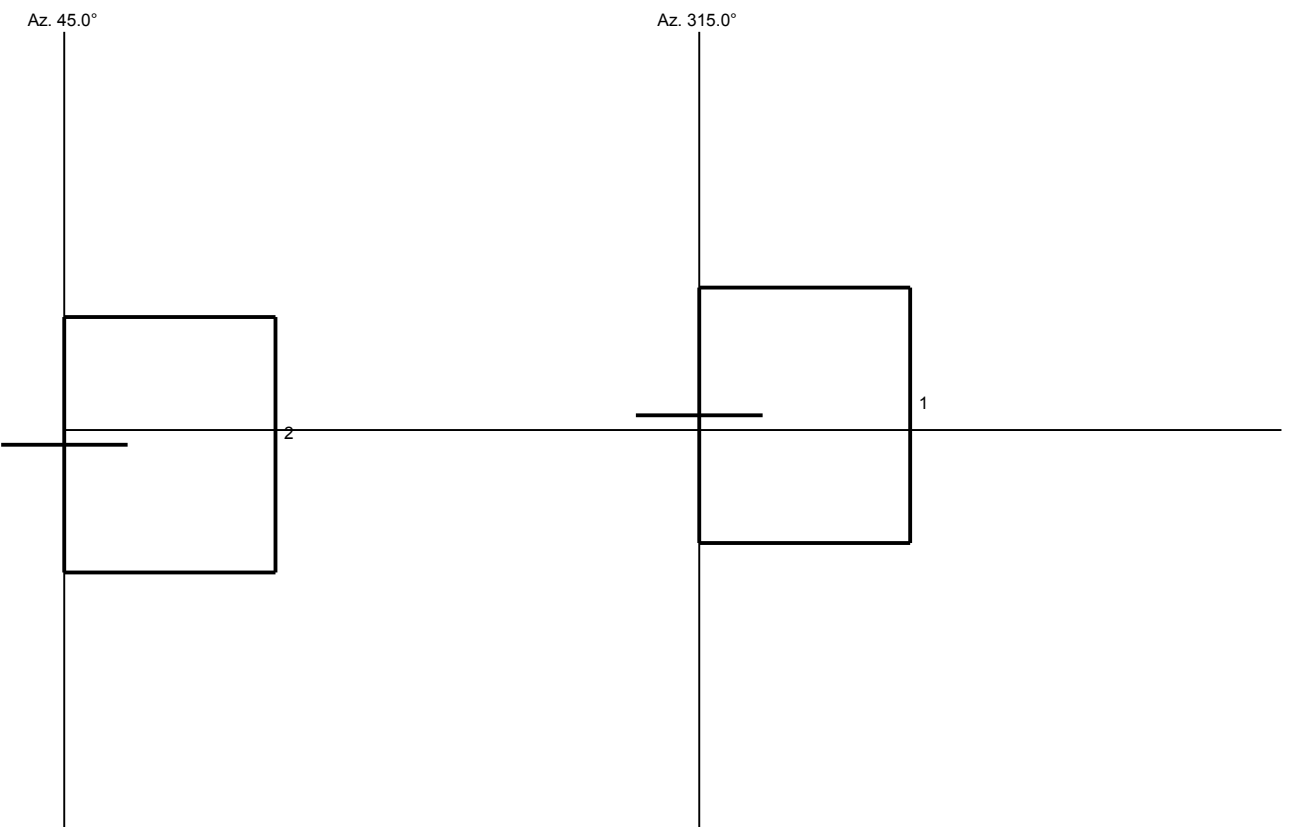
Geometr. and electrical data of Antenna System

	<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	50.000	0	315	0	+0.0	0.10	0.0	315.0	1	1	0.0	0.0
2	50.000	0	45	0	+0.0	-0.10	0.0	45.0	1	1	0.0	0.0

Plan of antenna system



Side of antenna system



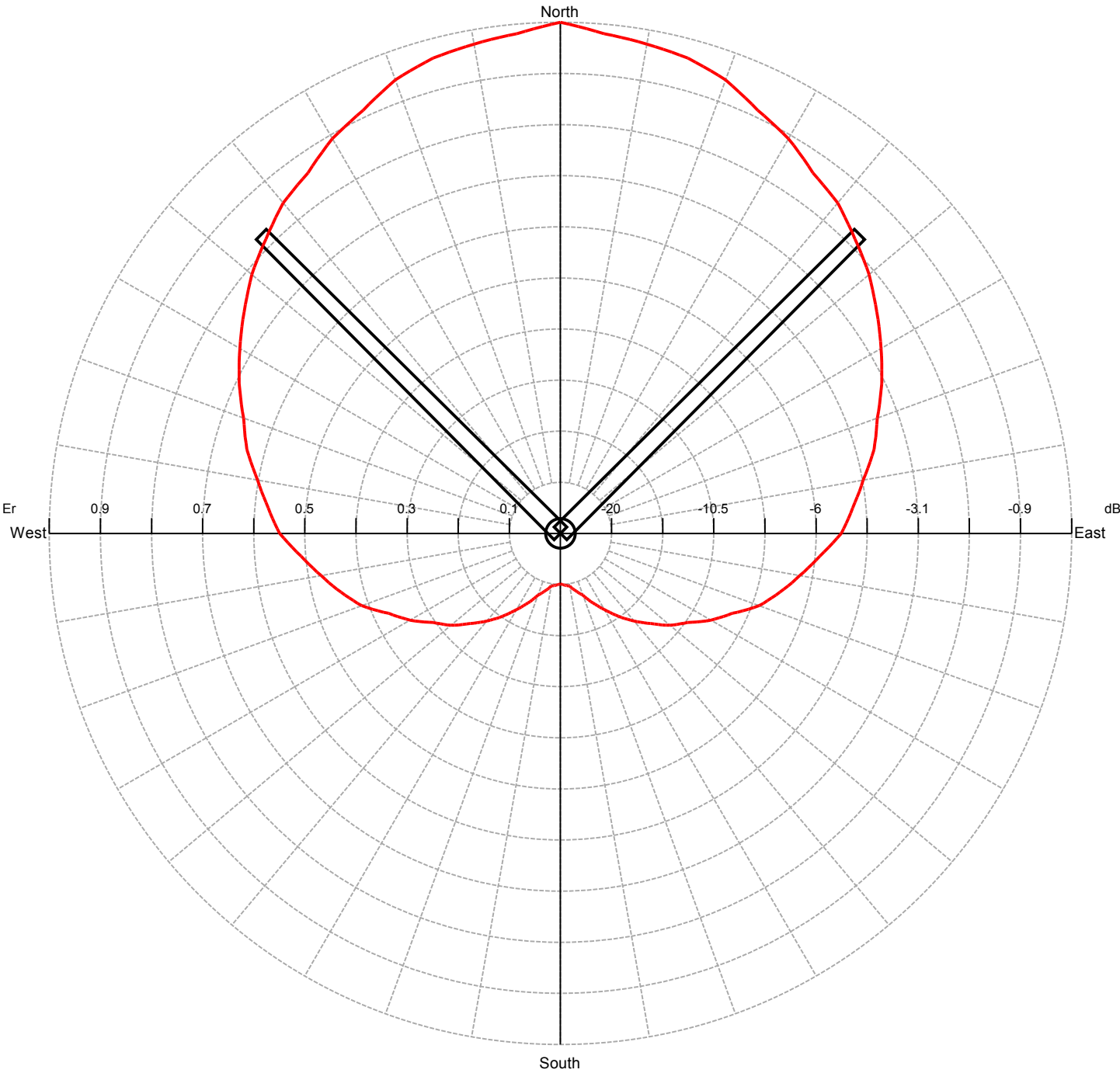
Antennas arrays data

A. Antennas array azimuth (°/N)	45	315
B. Number of antennas	1	1
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)	3.92	3.92
G. Distribution losses (dB)	0.00	0.00
H. Nominal max gain [F - G] (dBd)	3.92	3.92
I. Compensation losses (dB)	0.00	0.00
J. Effec. max gain [H - I] (dBd)	3.92	3.92
K. Effec. max gain (times)	2.46	2.46
L. Effec. max power [E * K] (KW)	1.2324	1.2324
M. Max power depr. angle (°)	0.0	0.0
N. Max power az. angle (°)	45	315

Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	5.1	90	-0.1	180	-15.0	270	-0.1
10	4.9	100	-1.4	190	-14.5	280	0.7
20	4.6	110	-2.6	200	-12.7	290	1.5
30	4.1	120	-4.3	210	-10.2	300	2.3
40	3.6	130	-6.0	220	-7.9	310	3.0
50	3.0	140	-7.9	230	-6.0	320	3.6
60	2.3	150	-10.2	240	-4.3	330	4.1
70	1.5	160	-12.7	250	-2.6	340	4.6
80	0.7	170	-14.5	260	-1.4	350	4.9

Horizontal diagram at 0.0° depres. (Total Antenna)

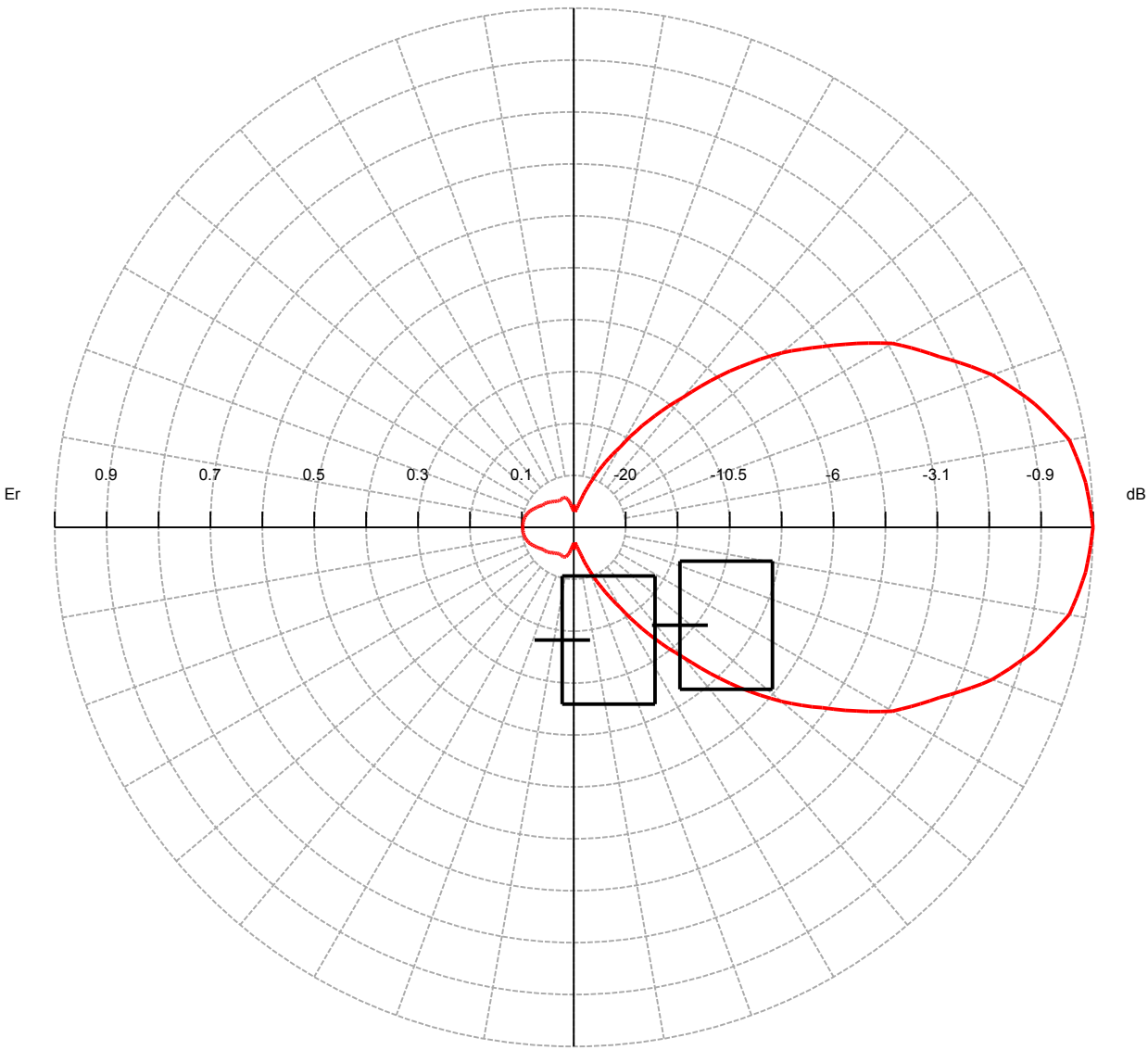


0.0° depres. (Total Antenna), Gain (dBd): 5.1

ERP T.Max(KW): 3.2343

ERP E.Max(KW): 3.2343

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 5.1

ERP T.Max(KW): 3.2343 ERP E.Max(KW): 3.2343