

TX station: 2xAkf1

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	2xAkf1
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-AKF_1 DIPOLE FM WB ECON.
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	AKF_1 DIPOLE FM WB
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	140
Width (cm)	6
Thickness (cm)	90
Weight (Kg)	4.5
Maximum power (KW)	0.5
Gain (dBd)	2.16
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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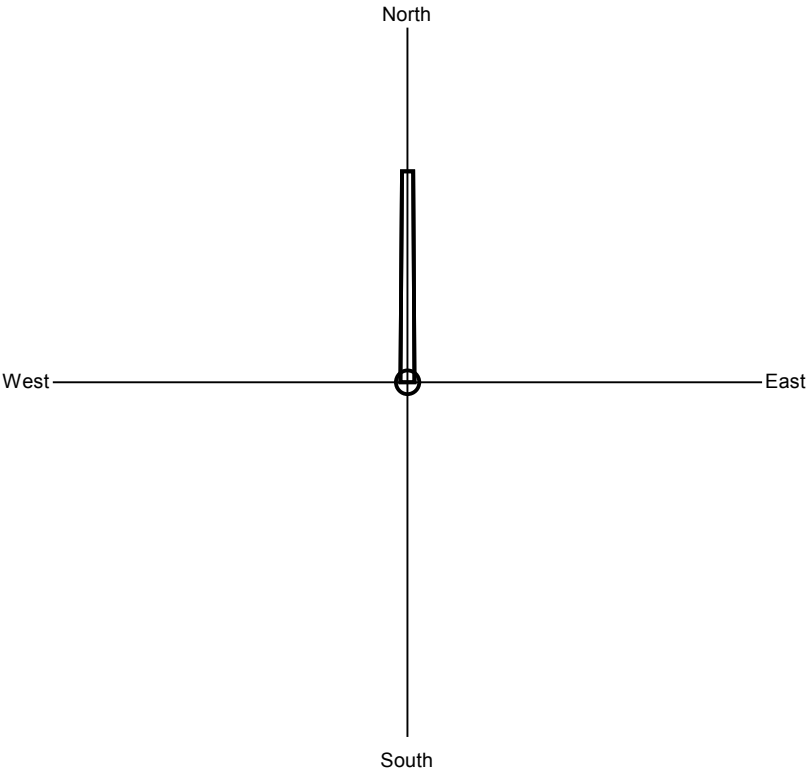
Geometr. and electrical data of Antenna System

	<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	50.000	0	0	0	+0.0	1.30	0.0	0.0	1	1	0.0	0.0
2	50.000	0	0	0	+0.0	-1.30	0.0	0.0	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)	0
B. Number of antennas	2
C. Nominal power supply (W)	1000.00
D. Losses (addit. + cables) (dB)	0.0
E. Effective power supply (W)	1000.00
F. Theor. maximum gain (dBd)	5.46
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	5.46
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	5.46
K. Effec. max gain (times)	3.52
L. Effec. max power [E * K] (KW)	3.5183
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	340

Diagram in dBK calculated at horizon

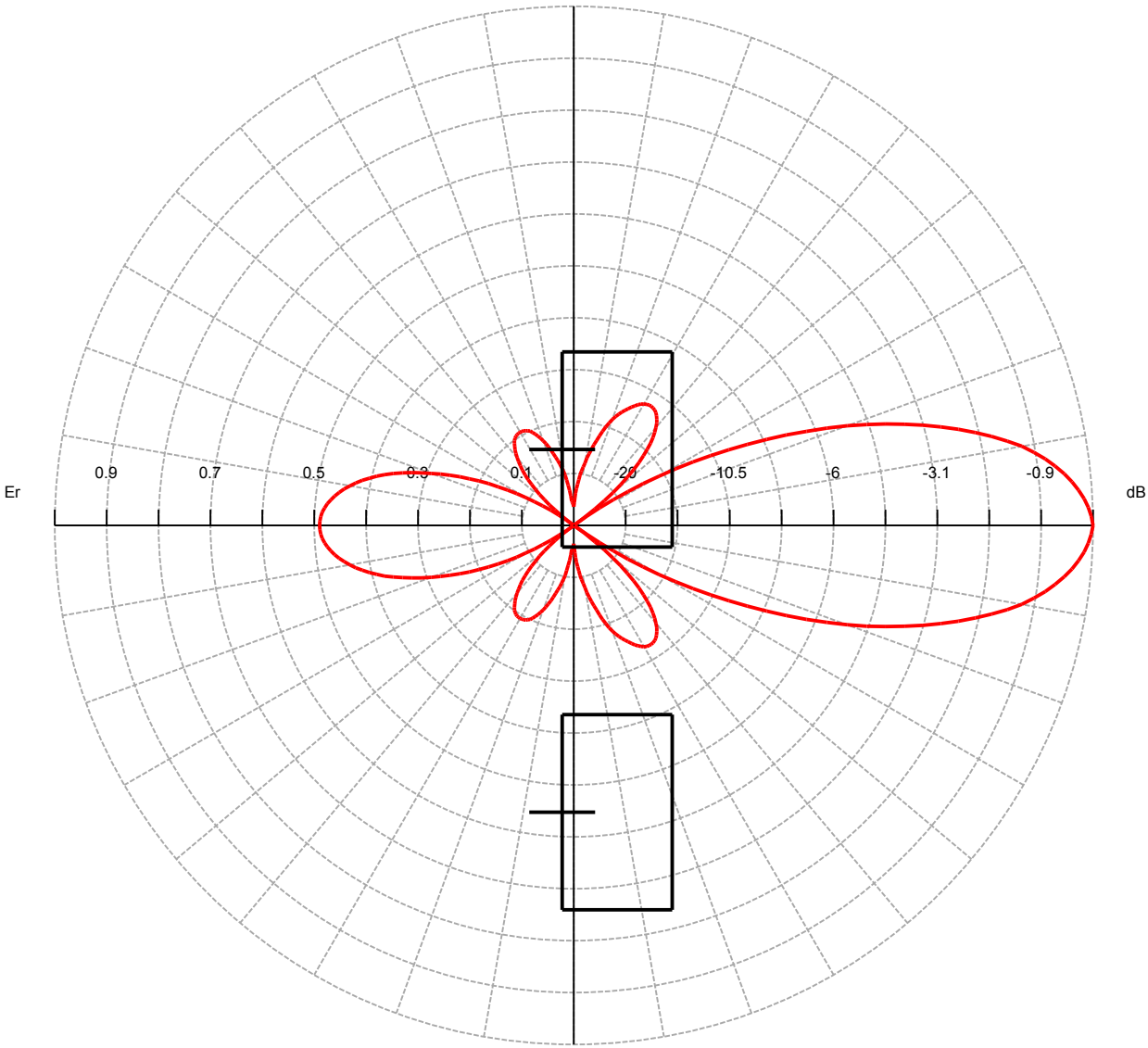
Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	5.5	90	2.6	180	-0.7	270	2.6
10	5.5	100	1.7	190	-0.7	280	3.4
20	5.5	110	0.8	200	-0.6	290	4.2
30	5.4	120	0.2	210	-0.6	300	4.6
40	5.3	130	-0.2	220	-0.4	310	5.1
50	5.1	140	-0.4	230	-0.2	320	5.3
60	4.6	150	-0.6	240	0.2	330	5.4
70	4.2	160	-0.6	250	0.8	340	5.5
80	3.4	170	-0.7	260	1.7	350	5.5



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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 5.46

ERP T.Max(KW): 3.5183    ERP E.Max(KW): 3.5183