

TX station: 4xAkh1

Gain solid integration : disabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	4xAkh1
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-AKH_1 DIPOLE 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	AKH_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)	2
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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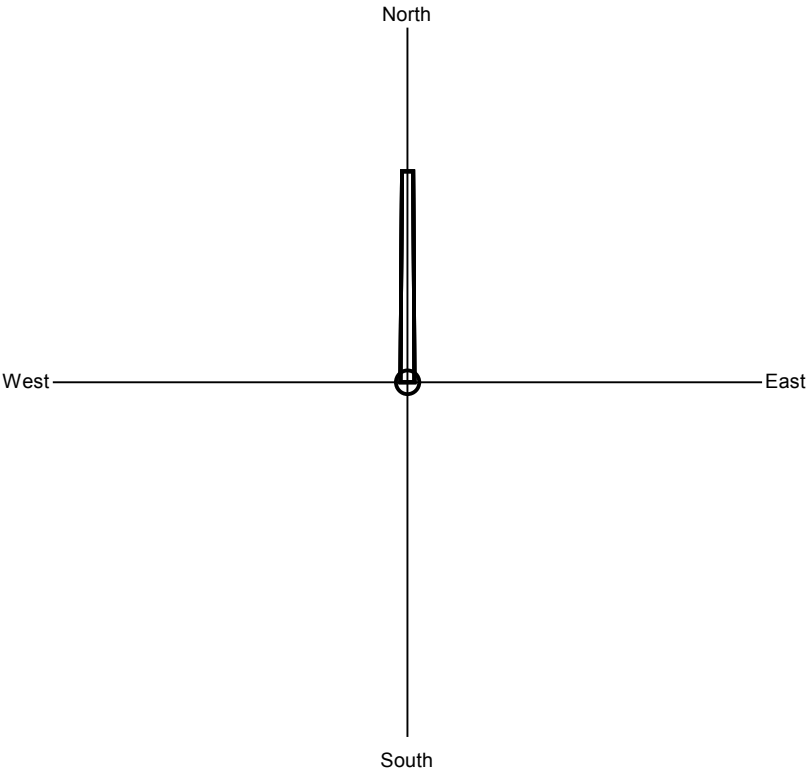
Geometr. and electrical data of Antenna System

	<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	25.000	0	0	0 +0.0	3.90	0.0	0.0	1	1	0.0	0.0
2	25.000	0	0	0 +0.0	1.30	0.0	0.0	1	1	0.0	0.0
3	25.000	0	0	0 +0.0	-1.30	0.0	0.0	1	1	0.0	0.0
4	25.000	0	0	0 +0.0	-3.90	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	4
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)	8.18
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	8.18
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	8.18
K. Effec. max gain (times)	6.58
L. Effec. max power [E * K] (KW)	6.5775
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	340

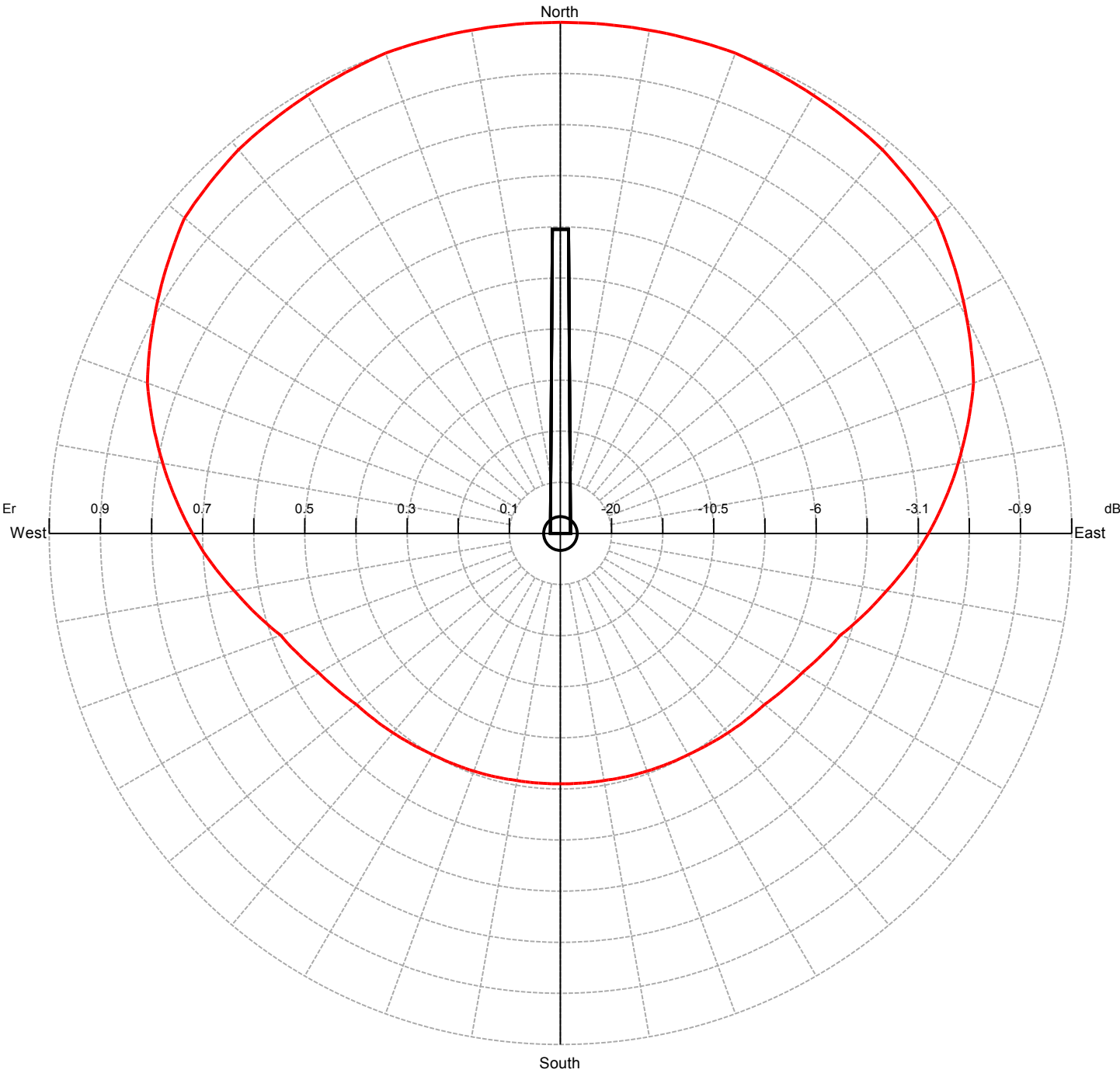
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	8.2	90	5.3	180	2.0	270	5.3
10	8.2	100	4.4	190	2.0	280	6.1
20	8.2	110	3.5	200	2.1	290	6.9
30	8.1	120	2.9	210	2.2	300	7.4
40	8.0	130	2.5	220	2.3	310	7.8
50	7.8	140	2.3	230	2.5	320	8.0
60	7.4	150	2.2	240	2.9	330	8.1
70	6.9	160	2.1	250	3.5	340	8.2
80	6.1	170	2.0	260	4.4	350	8.2

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Horizontal diagram at 0.0° depres. (Total Antenna)



0.0° depres. (Total Antenna), Gain (dBd): 8.18 ERP T.Max(KW): 6.5775 ERP E.Max(KW): 6.5775

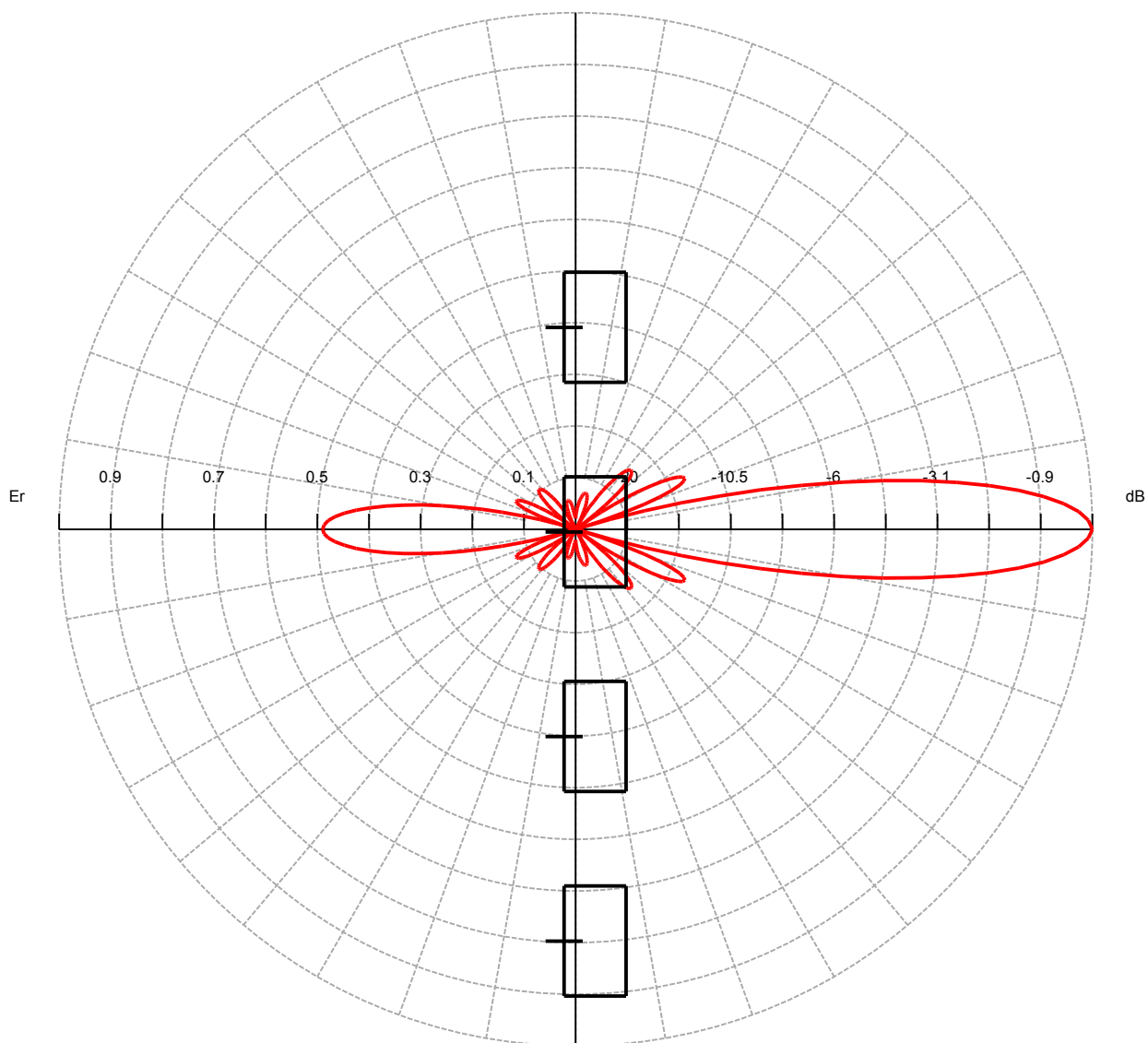
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## Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 8.18

ERP T.Max(KW): 6.5775 ERP E.Max(KW): 6.5775