

TX station: 6xAkl8

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	6xAkl8
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_8 LOG 8 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_8 LOG 8 ELEM. F
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	168
Width (cm)	6
Thickness (cm)	260
Weight (Kg)	14
Maximum power (KW)	2
Gain (dBd)	7.82
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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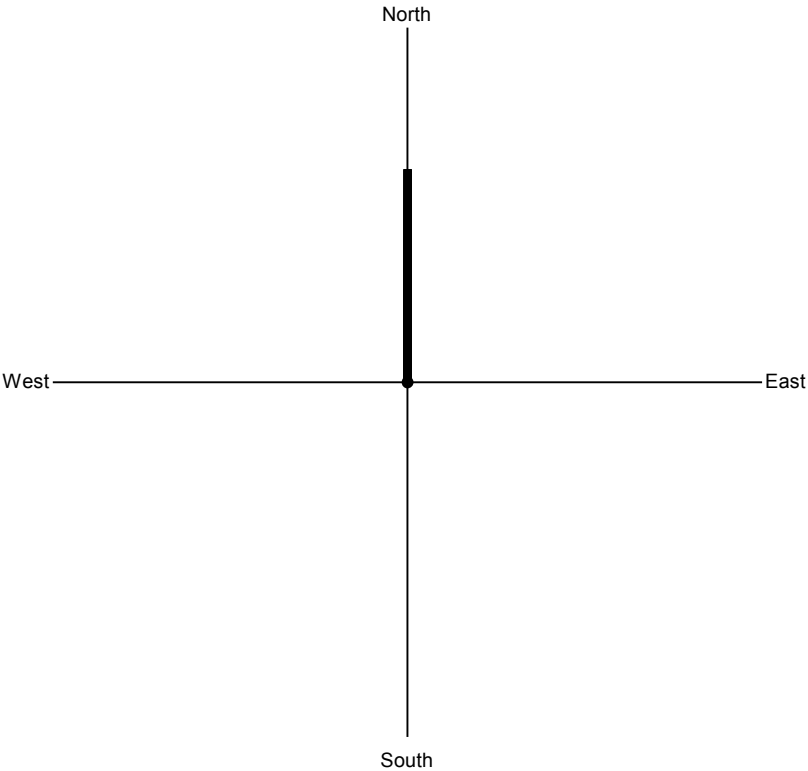
Geometr. and electrical data of Antenna System

	<i>Power</i> <i>(%)</i>	<i>Tilt</i> <i>(°)</i>	<i>Az.</i> <i>(°/N)</i>	<i>Phase</i> <i>(°)</i>	<i>V dist.</i> <i>(m)</i>	<i>Scr-d</i> <i>(cm)</i>	<i>Scr-Az</i> <i>(°/N)</i>	<i>Rot.</i> <i>(1÷4)</i>	<i>Type</i> <i>(1÷2)</i>	<i>L cables</i> <i>(cm)</i>	<i>Car. phase</i> <i>(°)</i>
1	16.667	0	0	0 +0.0	6.50	0.0	0.0	1	1	1550.0	0.0
2	16.667	0	0	0 +0.0	3.90	0.0	0.0	1	1	1550.0	0.0
3	16.667	0	0	0 +0.0	1.30	0.0	0.0	1	1	1550.0	0.0
4	16.667	0	0	0 +0.0	-1.30	0.0	0.0	1	1	1550.0	0.0
5	16.667	0	0	0 +0.0	-3.90	0.0	0.0	1	1	1550.0	0.0
6	16.667	0	0	0 +0.0	-6.50	0.0	0.0	1	1	1550.0	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	6
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)	14.53
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	14.53
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	14.53
K. Effec. max gain (times)	28.40
L. Effec. max power [E * K] (KW)	28.4048
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	14.5	90	-1.1	180	-5.5	270	-1.1
10	14.3	100	-3.2	190	-5.5	280	1.5
20	13.7	110	-5.0	200	-5.5	290	4.2
30	12.7	120	-5.5	210	-5.5	300	6.7
40	11.1	130	-5.5	220	-5.5	310	9.1
50	9.1	140	-5.5	230	-5.5	320	11.1
60	6.7	150	-5.5	240	-5.5	330	12.7
70	4.2	160	-5.5	250	-5.0	340	13.7
80	1.5	170	-5.5	260	-3.2	350	14.3

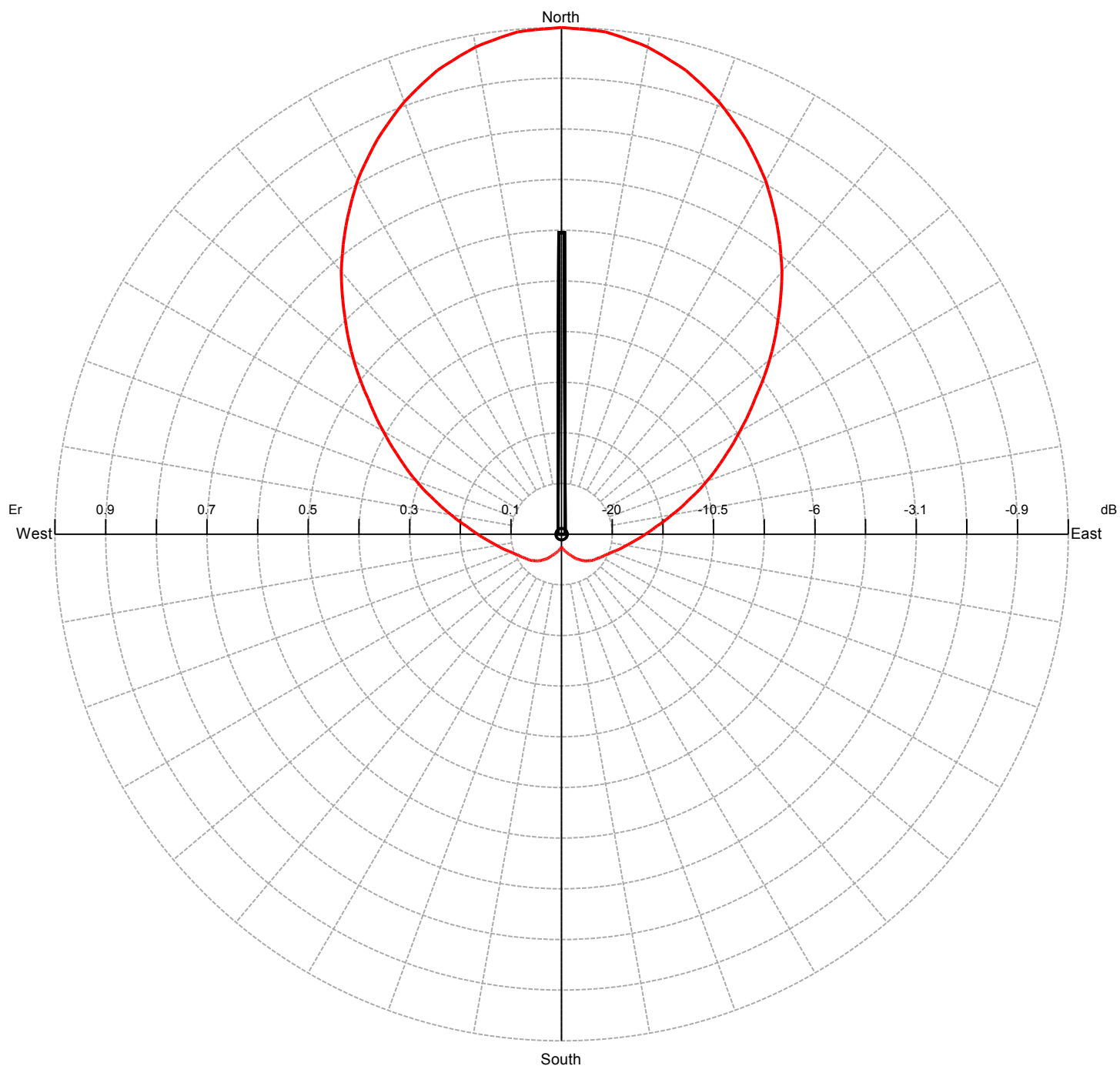
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## Horizontal diagram at 0.0° depres. (Total Antenna)



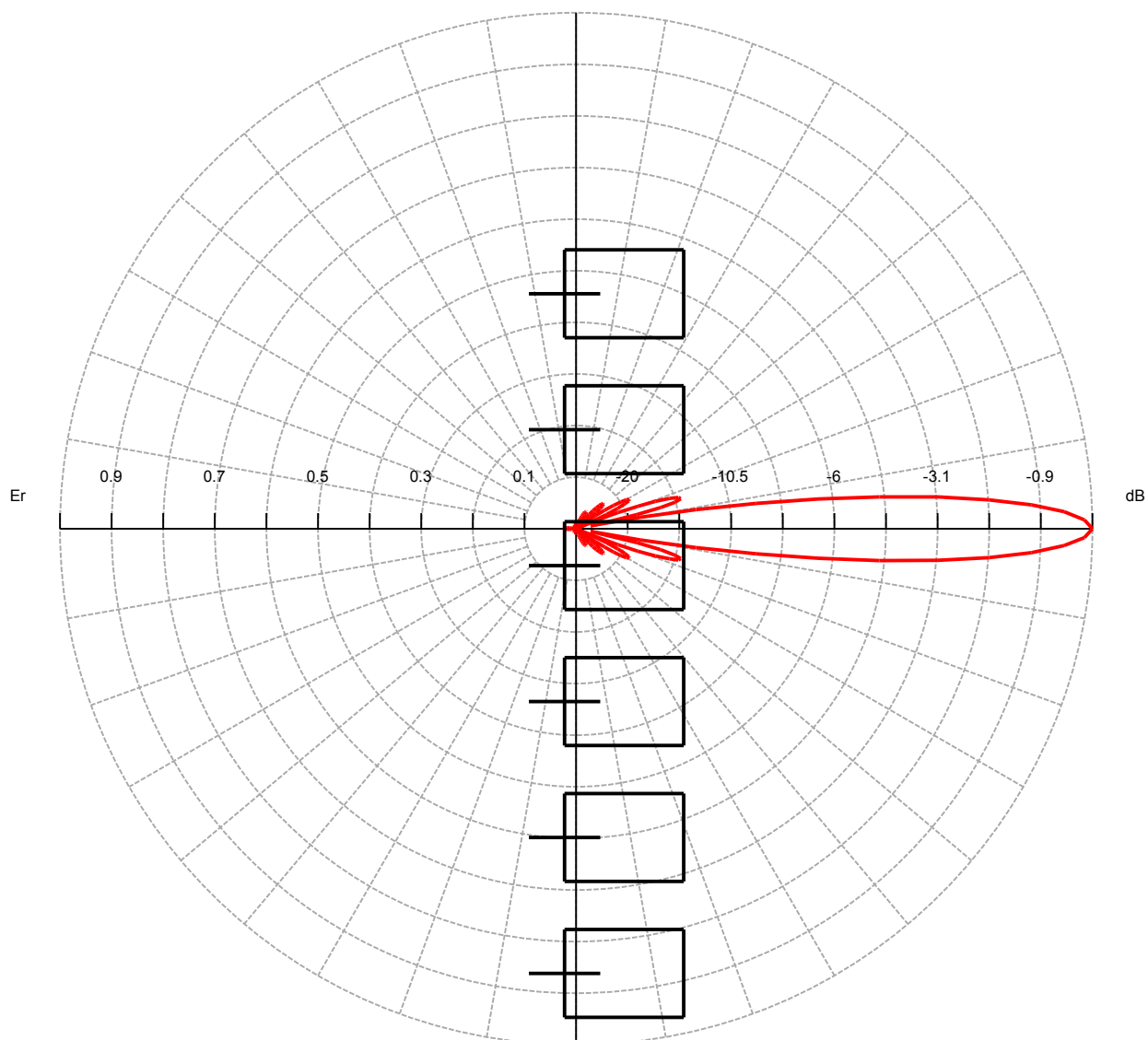
— 0.0° depres. (Total Antenna), Gain (dBd): 14.53

ERP T.Max(KW): 28.4048 ERP E.Max(KW): 28.4048

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### Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 14.53

ERP T.Max(KW): 28.4048 ERP E.Max(KW): 28.4048