

TX station: 8xEKR2

Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

TX station	8xEKR2
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)	120.000
Antenna system central frequency (MHz)	125.000
Antenna base diagrams type 1	LABEL ITALY-EKR_2 AERONAUTICAL PANEL
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	EKR_2 AERONAUTICAL
Band start(MHz)	118
Band stop(MHz)	144
diagrams Frequency(MHz)	125
Polariz (H,V,C,X)	V
Vertical dist (cm)	185
Height (cm)	135
Width (cm)	190
Thickness (cm)	62
Weight (Kg)	35
Maximum power (KW)	2
Gain (dBd)	8
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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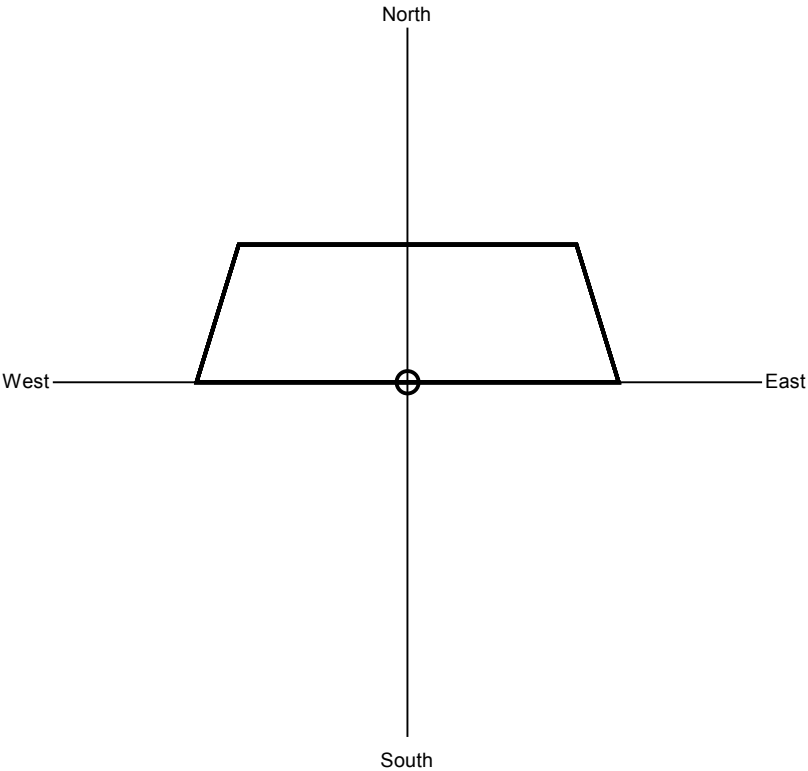
Geometr. and electrical data of Antenna System

	<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	12.500	0	0	0 +0.0	7.70	0.0	0.0	1	1	0.0	0.0
2	12.500	0	0	0 +0.0	5.50	0.0	0.0	1	1	0.0	0.0
3	12.500	0	0	0 +0.0	3.30	0.0	0.0	1	1	0.0	0.0
4	12.500	0	0	0 +0.0	1.10	0.0	0.0	1	1	0.0	0.0
5	12.500	0	0	0 +0.0	-1.10	0.0	0.0	1	1	0.0	0.0
6	12.500	0	0	0 +0.0	-3.30	0.0	0.0	1	1	0.0	0.0
7	12.500	0	0	0 +0.0	-5.50	0.0	0.0	1	1	0.0	0.0
8	12.500	0	0	0 +0.0	-7.70	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	8
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)	17.02
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	17.02
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	17.02
K. Effec. max gain (times)	50.32
L. Effec. max power [E * K] (KW)	50.3159
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

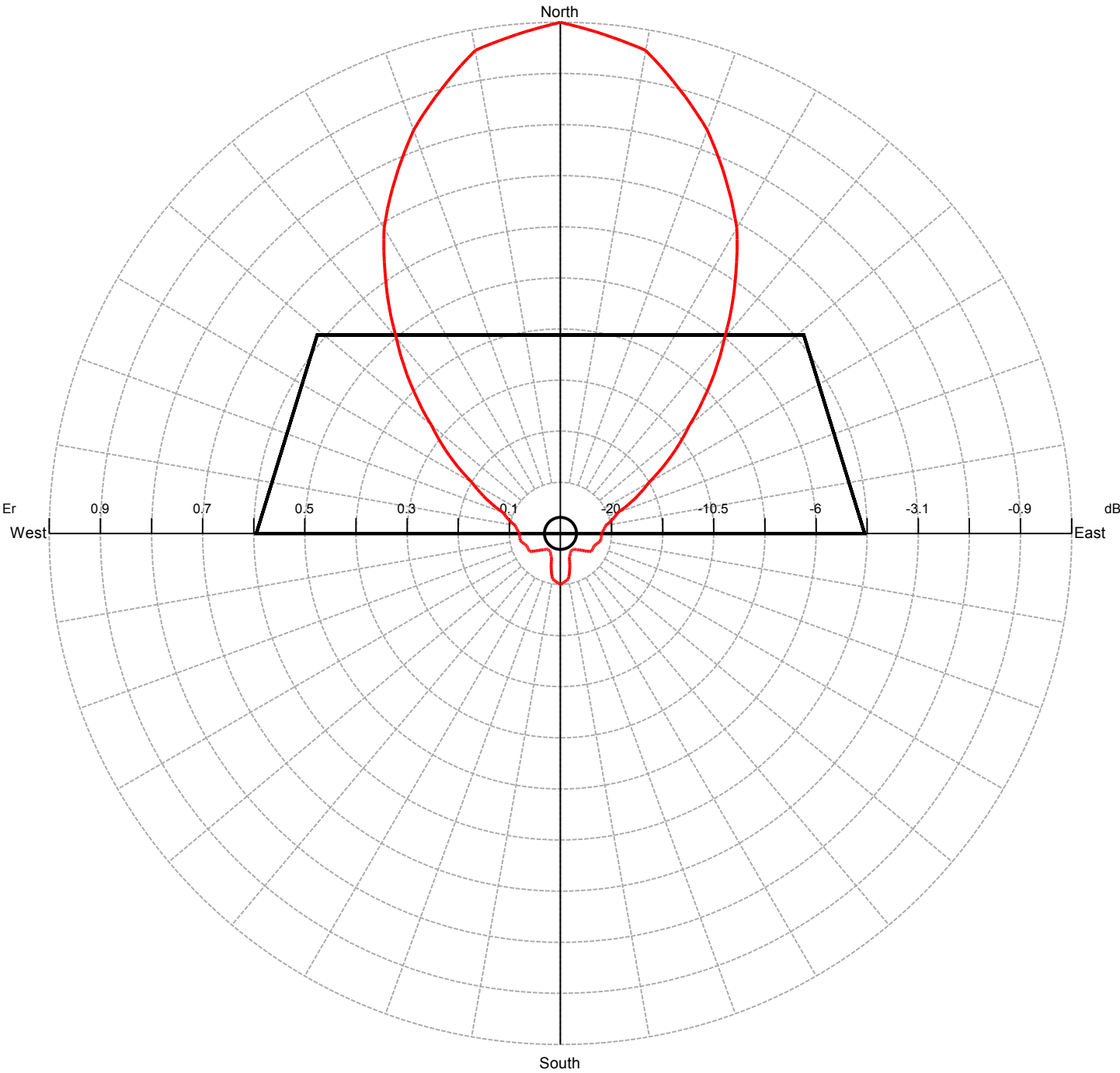
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	17.0	90	-3.0	180	-3.0	270	-3.0
10	16.7	100	-3.0	190	-3.0	280	-3.0
20	15.5	110	-3.0	200	-3.0	290	-1.4
30	13.8	120	-3.0	210	-3.0	300	3.0
40	11.0	130	-3.0	220	-3.0	310	7.4
50	7.4	140	-3.0	230	-3.0	320	11.0
60	3.0	150	-3.0	240	-3.0	330	13.8
70	-1.4	160	-3.0	250	-3.0	340	15.5
80	-3.0	170	-3.0	260	-3.0	350	16.7

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Horizontal diagram at 0.0° depres. (Total Antenna)

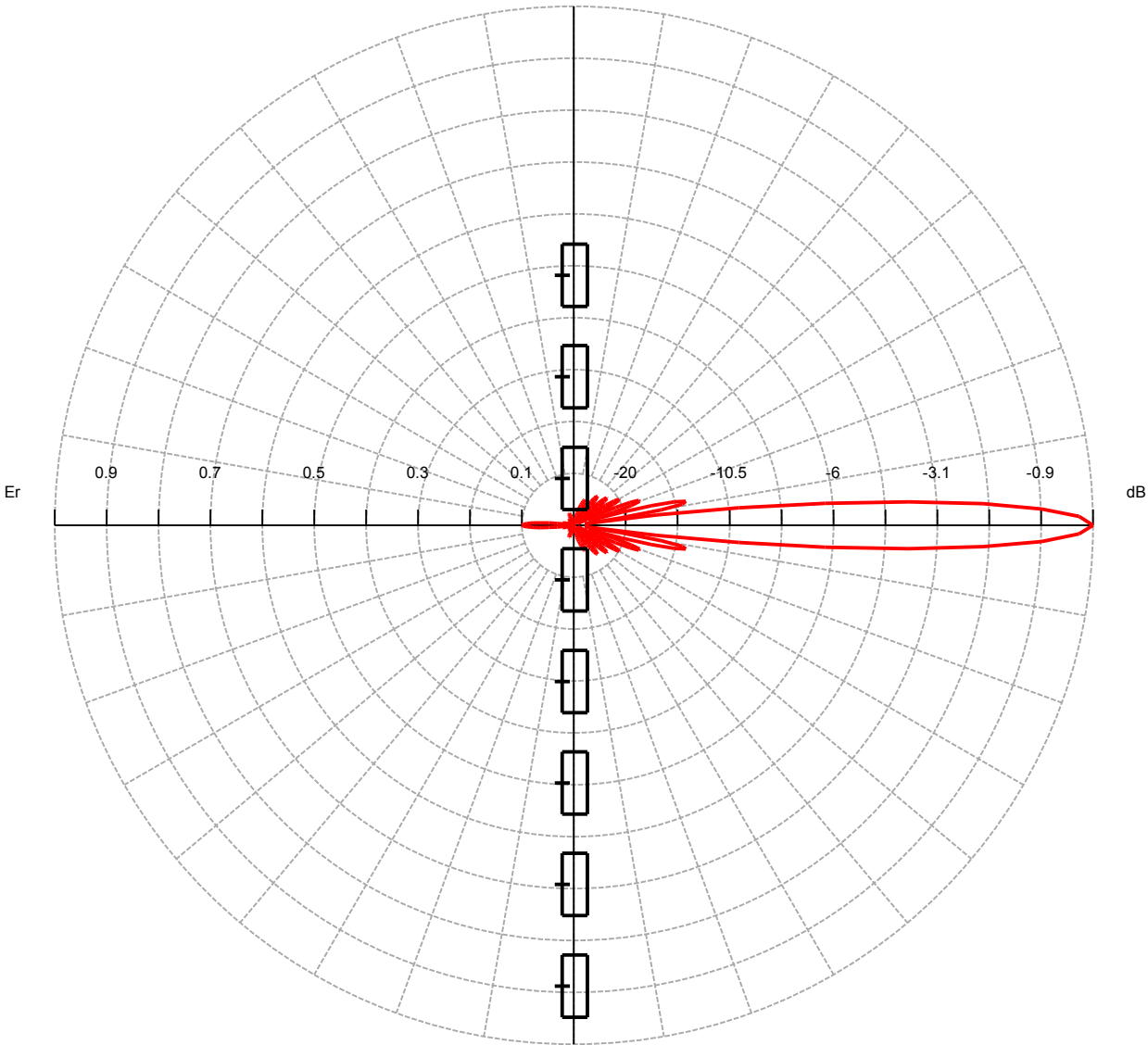


0.0° depres. (Total Antenna), Gain (dBd): 17.02 ERP T.Max(KW): 50.3159 ERP E.Max(KW): 50.3159

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 17.02

ERP T.Max(KW): 50.3159 ERP E.Max(KW): 50.3159