

TX station: 2xAkk2-Bidir

Gain solid integration : disabled

Site Name: Labelitaly

General data of Antenna System

TX station	2xAkk2-Bidir
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-AKK_2V PANEL W.B. FM vertical pol.
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):	175.0
Mast cross section (T/Q/C)	Q
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	AKK_2V PANEL W.B. F
Band start(MHz)	88
Band stop(MHz)	105
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	310
Height (cm)	174
Width (cm)	248
Thickness (cm)	80
Weight (Kg)	45
Maximum power (KW)	5
Gain (dBd)	8.1
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	0
R.C.Phase (°)	0

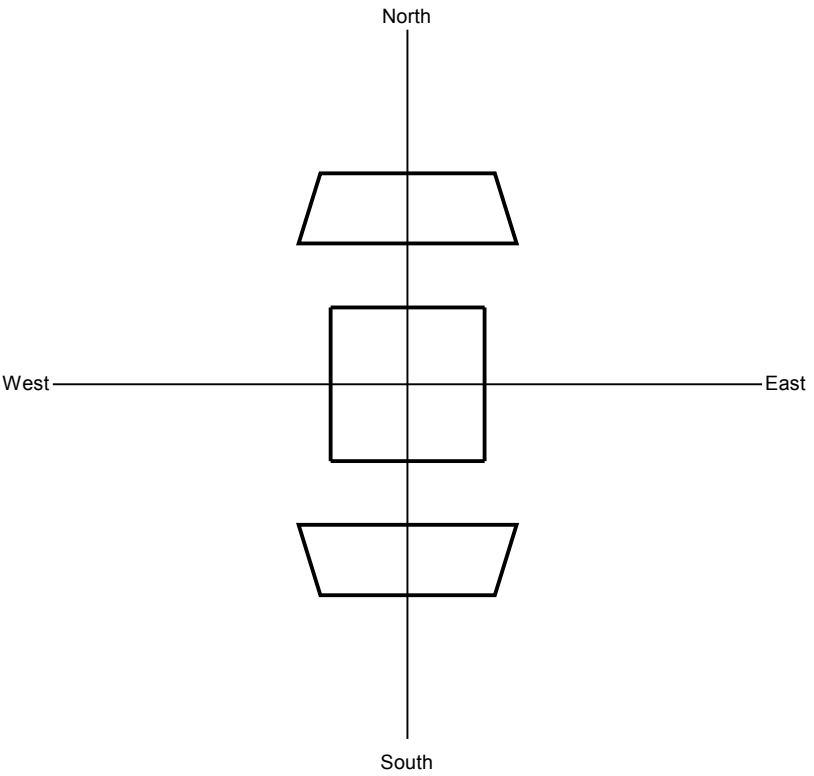
TX station: 2xAkk2-Bidir
Frequency: 98.00 MHz
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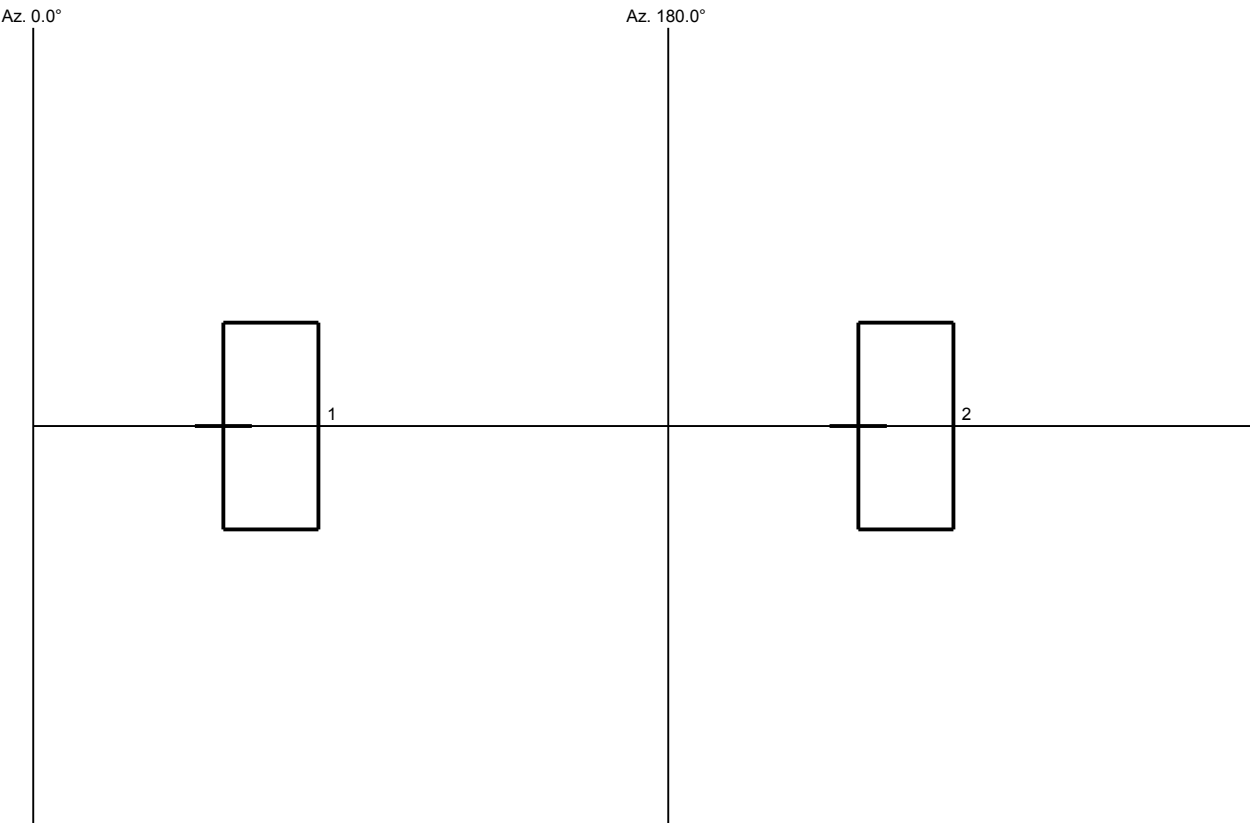
Geometr. and electrical data of Antenna System

	<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	0.00	160.0	0.0	1	1	0.0	0.0
2	50.000	0	180	0	+0.0	0.00	160.0	180.0	1	1	0.0	0.0

Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	0	180
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)	8.10	8.10
G. Distribution losses (dB)	0.00	0.00
H. Nominal max gain [F - G] (dBd)	8.10	8.10
I. Compensation losses (dB)	0.00	0.00
J. Effec. max gain [H - I] (dBd)	8.10	8.10
K. Effec. max gain (times)	6.46	6.46
L. Effec. max power [E * K] (KW)	3.2283	3.2283
M. Max power depr. angle (°)	-3.0	-3.0
N. Max power az. angle (°)	358	178

Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	4.9	90	-8.9	180	4.9	270	-8.9
10	4.4	100	-11.1	190	4.4	280	-11.1
20	3.2	110	-14.9	200	3.2	290	-14.9
30	1.6	120	-10.0	210	1.6	300	-10.0
40	-0.8	130	-3.6	220	-0.8	310	-3.6
50	-3.6	140	-0.8	230	-3.6	320	-0.8
60	-10.0	150	1.6	240	-10.0	330	1.6
70	-14.9	160	3.2	250	-14.9	340	3.2
80	-11.1	170	4.4	260	-11.1	350	4.4