

TX station: LABEL ITALY

Site name: TEST21

### General data of antenna system

TX station	LABEL ITALY
Site name	TEST21
Site longitude (+ddd°pp'ss")	
Site latitude (+dd°pp'ss")	
Ground level a.s.l. (m)	100
Antenna system height a.g.l. (m)	100.0
Transmitter power (Watt)	2000
Carrier wave frequency (MHz)	210.00
Antenna system central frequency (MHz)	210.00
Filename of antenna base diagrams type 1	LABEL_BKK2-H.ANT
Filename of antenna base diagrams type 2	
Antenna system polarization (H, V, C, X)	H
Transmitting cable attenuation (dB)	0.5
Additional attenuations (dB)	0.5
Base diagrams sectors (A = all, F = front)	A
Velocity factor of cables to antennas (0÷1)	0.88
Coordinate system (C = cartesian, P = polar)	P
Mast side/diameter (cm):	50.0
Mast cross section (Triangular, Square, Circular)	S
Mast rotation w.r.t. North (°)	0
System picture filename (*.bmp *.gif *.jpg)	

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### Information about antennas used in the system

#### *Antenna of type 1*

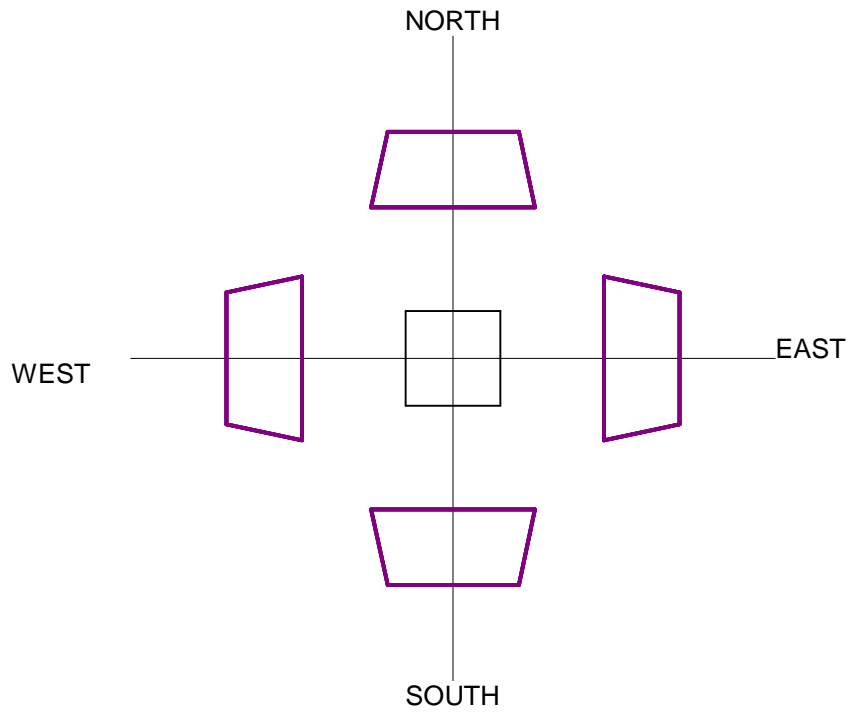
Manufacturer	LABEL ITALY
Antenna model	BKK/2 - PANEL VHF WB
Band start (MHz)	174
Band stop (MHz)	225
Diagrams frequency (MHz)	200
Polariz. (H, V, C, X)	H
Vertical dist. (cm)	150
Height (cm)	125
Width (cm)	87
Thickness (cm)	40
Weight (Kg)	25
Maximum power (KW)	5
Gain (dBd)	8
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	-22
R.C. phase (°)	0

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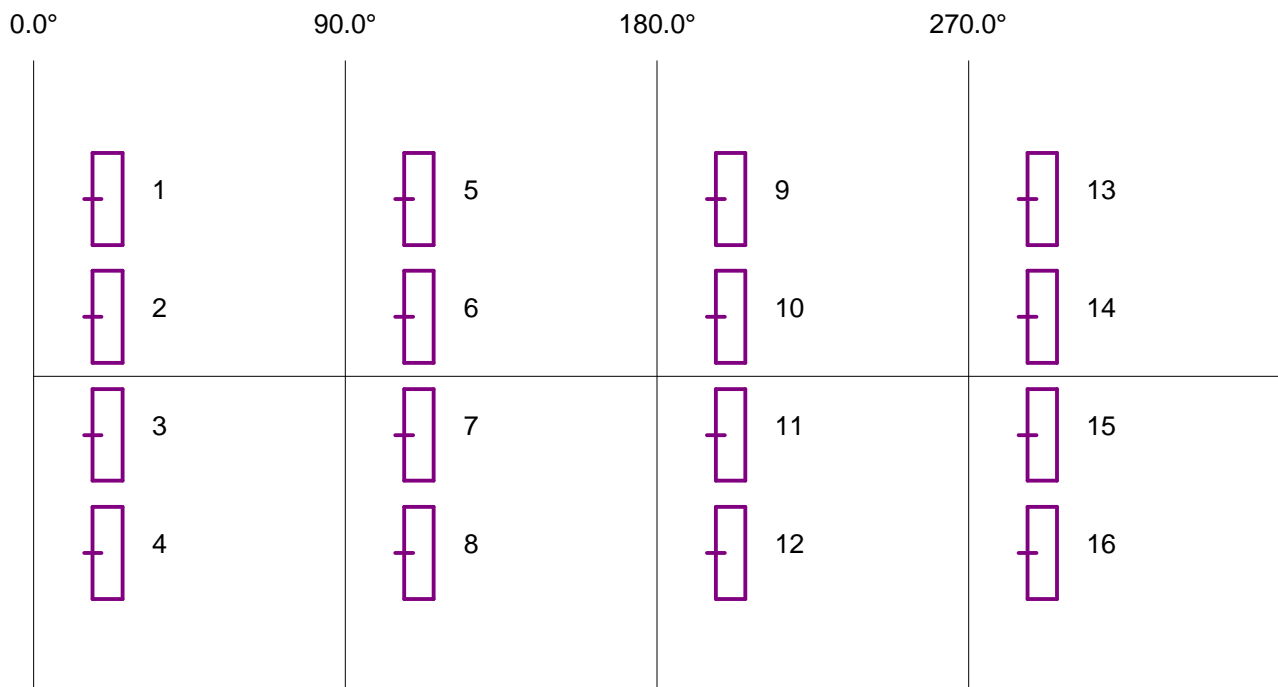
**Geometr. and electrical data of antenna system**

	<i>Power (%)</i>	<i>Tilt (°)</i>	<i>Az. (°/N)</i>	<i>Phase (°)</i>	<i>V dist. (m)</i>	<i>Scr-D (cm)</i>	<i>Scr-Az (°/N)</i>	<i>Rot. (1÷4)</i>	<i>Type (1÷2)</i>	<i>L cables (cm)</i>	<i>Car. phase (°)</i>
1	6.250	0	0	0 +0.0	2.40	80.0	0.0	1	1	0.0	0.0
2	6.250	0	0	0 +0.0	0.80	80.0	0.0	1	1	0.0	0.0
3	6.250	0	0	0 +0.0	-0.80	80.0	0.0	1	1	0.0	0.0
4	6.250	0	0	0 +0.0	-2.40	80.0	0.0	1	1	0.0	0.0
5	6.250	0	90	0 +0.0	2.40	80.0	90.0	1	1	0.0	0.0
6	6.250	0	90	0 +0.0	0.80	80.0	90.0	1	1	0.0	0.0
7	6.250	0	90	0 +0.0	-0.80	80.0	90.0	1	1	0.0	0.0
8	6.250	0	90	0 +0.0	-2.40	80.0	90.0	1	1	0.0	0.0
9	6.250	0	180	0 +0.0	2.40	80.0	180.0	1	1	0.0	0.0
10	6.250	0	180	0 +0.0	0.80	80.0	180.0	1	1	0.0	0.0
11	6.250	0	180	0 +0.0	-0.80	80.0	180.0	1	1	0.0	0.0
12	6.250	0	180	0 +0.0	-2.40	80.0	180.0	1	1	0.0	0.0
13	6.250	0	270	0 +0.0	2.40	80.0	270.0	1	1	0.0	0.0
14	6.250	0	270	0 +0.0	0.80	80.0	270.0	1	1	0.0	0.0
15	6.250	0	270	0 +0.0	-0.80	80.0	270.0	1	1	0.0	0.0
16	6.250	0	270	0 +0.0	-2.40	80.0	270.0	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	90	180	270
B. Number of antennas	4	4	4	4
C. Nominal power supply (W)	500.00	500.00	500.00	500.00
D. Losses (addit. + cables) (dB)	1.0	1.0	1.0	1.0
E. Effective power supply (W)	397.16	397.16	397.16	397.16
F. Theor. maximum gain (dBd)	14.02	14.02	14.02	14.02
G. Distribution losses (dB)	0.00	0.00	0.00	0.00
H. Nominal max gain [F - G] (dBd)	14.02	14.02	14.02	14.02
I. Compensation losses (dB)	0.00	0.00	0.00	0.00
J. Effec. max gain [H - I] (dBd)	14.02	14.02	14.02	14.02
K. Effec. max gain (times)	25.24	25.24	25.24	25.24
L. Effec. max power [E * K] (KW)	10.0237	10.0237	10.0237	10.0237
M. Max power depr. angle (°)	0.0	0.0	0.0	0.0
N. Max power az. angle (°)	0	90	180	270

**Diagram in dBK calculated at horizon**

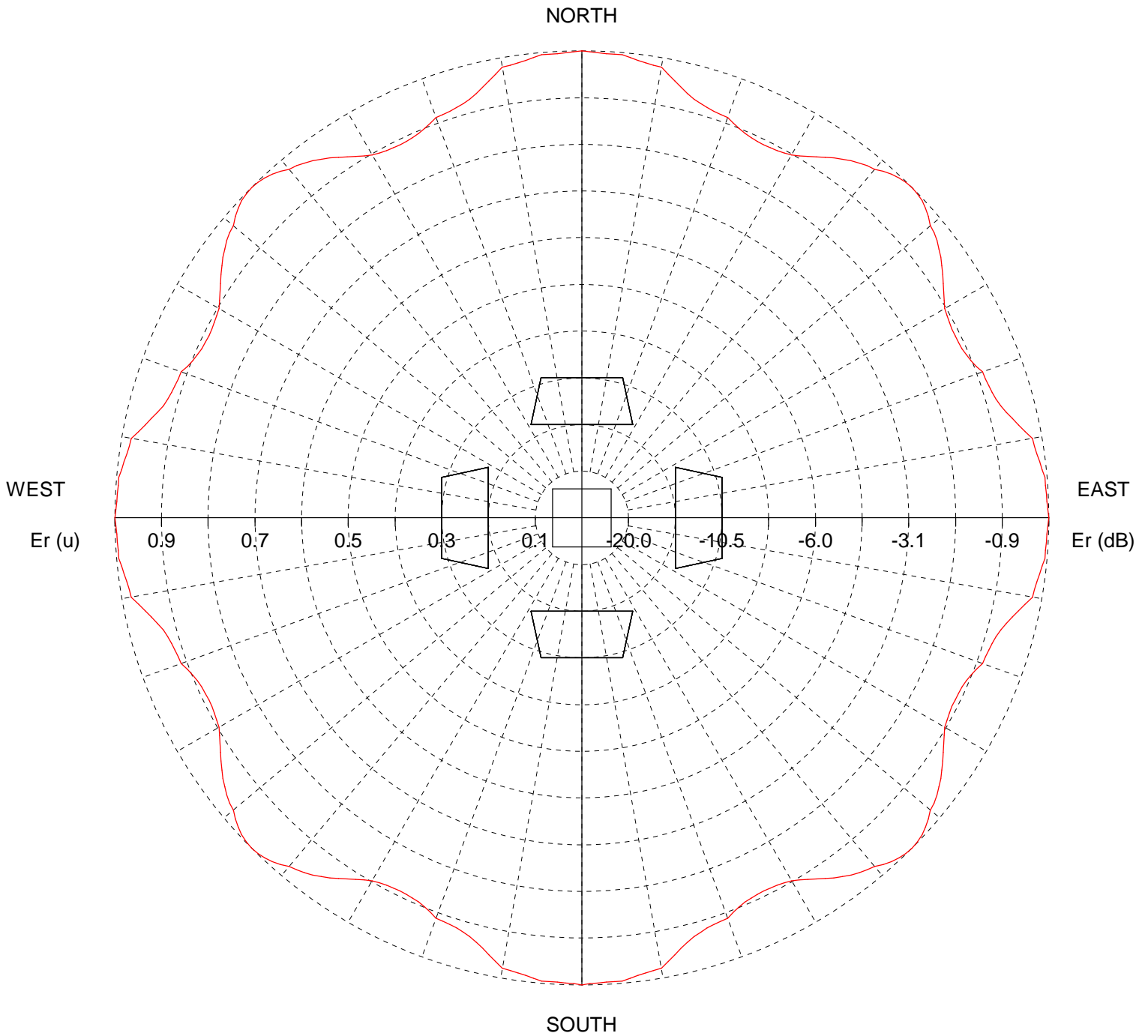
Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	9.0	90	9.0	180	9.0	270	9.0
10	8.8	100	8.8	190	8.8	280	8.8
20	8.2	110	8.2	200	8.2	290	8.2
30	8.1	120	8.1	210	8.1	300	8.1
40	8.8	130	8.8	220	8.8	310	8.8
50	8.8	140	8.8	230	8.8	320	8.8
60	8.1	150	8.1	240	8.1	330	8.1
70	8.2	160	8.2	250	8.2	340	8.2
80	8.8	170	8.8	260	8.8	350	8.8

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### Horizontal diagram



— 0.0° depres. (Total antenna), Gain (dBd): 7.01 ERP T.max (KW): 10.045 ERP E.max (KW): 7.979

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### Vertical diagram

