

TX station: 4xAkk2

Gain solid integration : disabled

Site Name: Labelitaly

General data of Antenna System

| | |
|---|--|
| TX station | 4xAkk2 |
| 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): | 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 | 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 |

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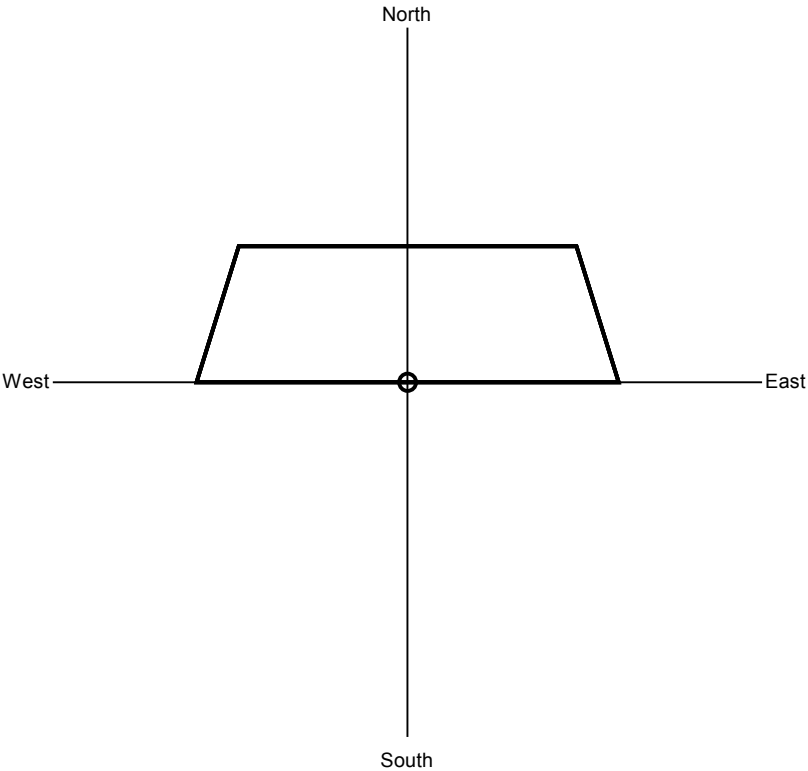
Geometr. and electrical data of Antenna System

| | <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 | 25.000 | 0 | 0 | 0 +0.0 | 4.20 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 2 | 25.000 | 0 | 0 | 0 +0.0 | 1.40 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 3 | 25.000 | 0 | 0 | 0 +0.0 | -1.40 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 4 | 25.000 | 0 | 0 | 0 +0.0 | -4.20 | 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) | 14.12 |
| G. Distribution losses (dB) | 0.00 |
| H. Nominal max gain [F - G] (dBd) | 14.12 |
| I. Compensation losses (dB) | 0.00 |
| J. Effec. max gain [H - I] (dBd) | 14.12 |
| K. Effec. max gain (times) | 25.83 |
| L. Effec. max power [E * K] (KW) | 25.8262 |
| M. Max power depr. angle (°) | 0.0 |
| N. Max power az. angle (°) | 358 |

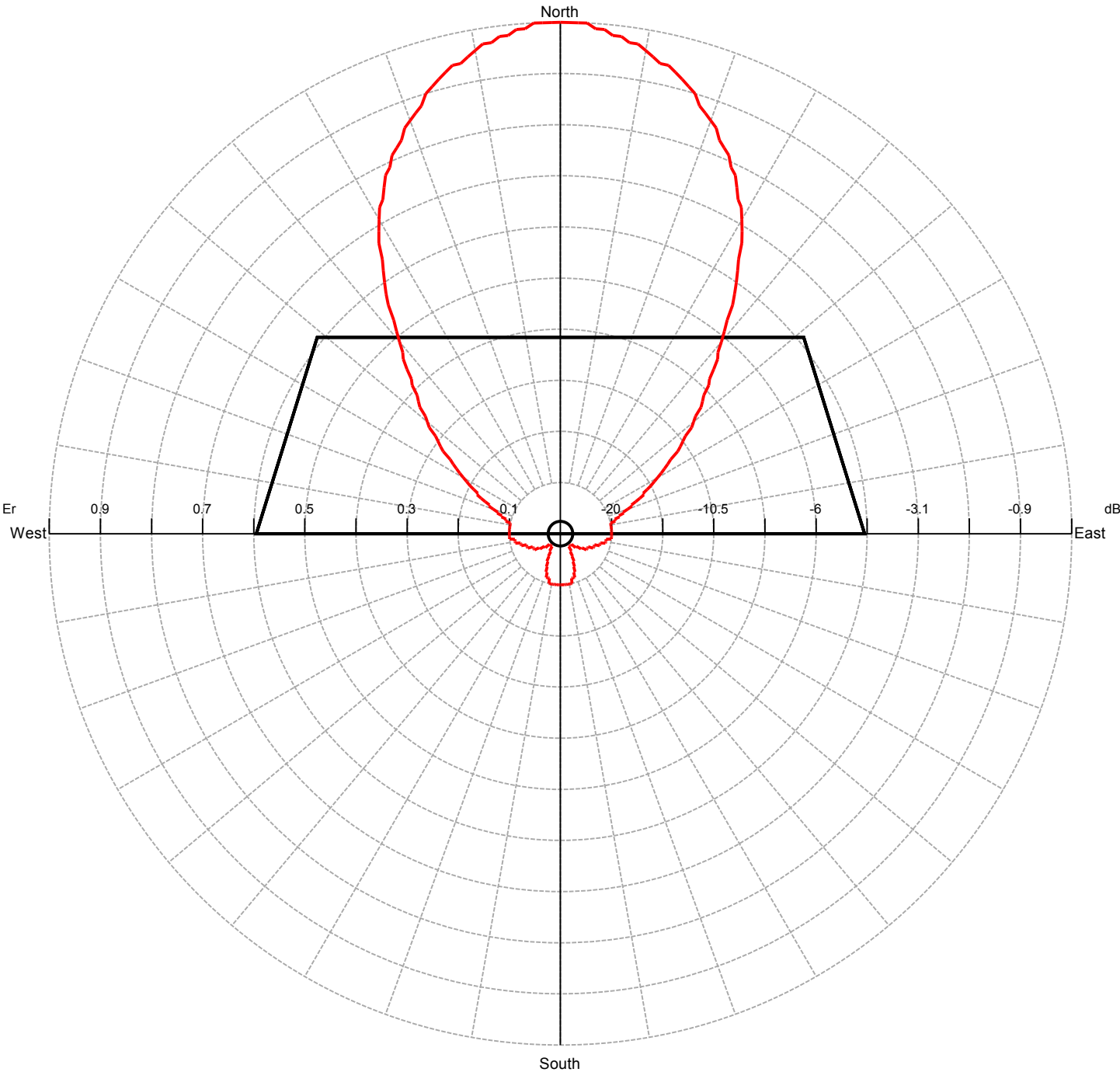
Diagram in dBK calculated at horizon

| Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK |
|-----------|------|-----------|------|-----------|------|-----------|------|
| 0 | 14.1 | 90 | -5.9 | 180 | -5.9 | 270 | -5.9 |
| 10 | 13.8 | 100 | -5.9 | 190 | -5.9 | 280 | -5.9 |
| 20 | 12.8 | 110 | -5.9 | 200 | -5.9 | 290 | -3.0 |
| 30 | 11.1 | 120 | -5.9 | 210 | -5.9 | 300 | 1.0 |
| 40 | 7.9 | 130 | -5.9 | 220 | -5.9 | 310 | 4.8 |
| 50 | 4.8 | 140 | -5.9 | 230 | -5.9 | 320 | 7.9 |
| 60 | 1.0 | 150 | -5.9 | 240 | -5.9 | 330 | 11.1 |
| 70 | -3.0 | 160 | -5.9 | 250 | -5.9 | 340 | 12.8 |
| 80 | -5.9 | 170 | -5.9 | 260 | -5.9 | 350 | 13.8 |

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Horizontal diagram at 0.0° depres. (Total Antenna)



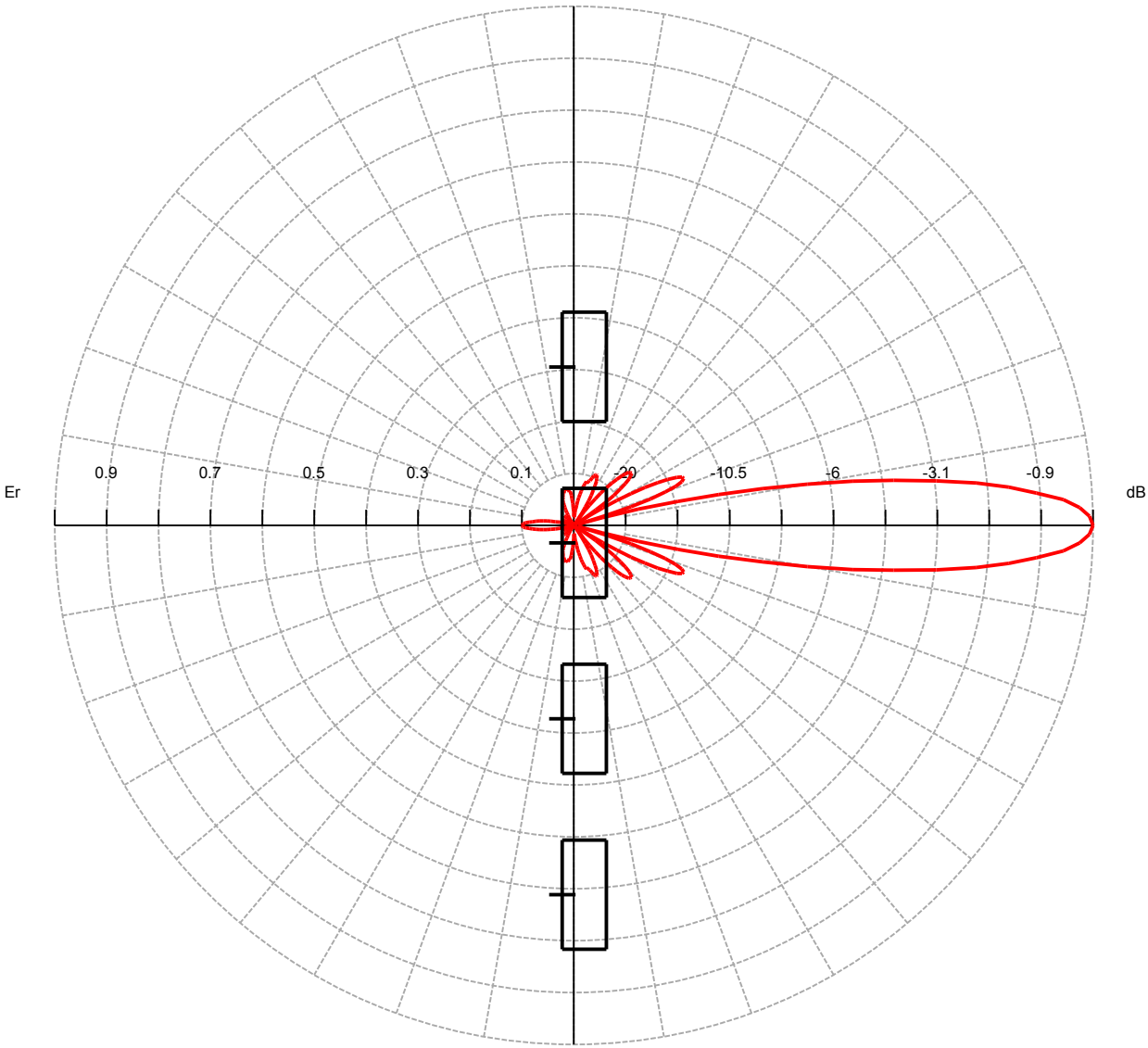
0.0° depres. (Total Antenna), Gain (dBd): 14.12

ERP T.Max(KW): 25.8262 ERP E.Max(KW): 25.8262

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 14.12

ERP T.Max(KW): 25.8262 ERP E.Max(KW): 25.8262