

TX station: 4xAks1

Gain solid integration : disabled

Site Name: Labelitaly

General data of Antenna System

| | |
|---|---|
| TX station | 4xAks1 |
| 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-AKS_1 DIPOLE FM WB DEMOUNT. |
| 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 | AKS_1 DIPOLE FM WB |
| Band start(MHz) | 88 |
| Band stop(MHz) | 108 |
| diagrams Frequency(MHz) | 98 |
| Polariz (H,V,C,X) | V |
| Vertical dist (cm) | 260 |
| Height (cm) | 140 |
| Width (cm) | 6 |
| Thickness (cm) | 90 |
| Weight (Kg) | 4.5 |
| Maximum power (KW) | 2 |
| Gain (dBd) | 2.16 |
| North E.C. (cm) | 0 |
| East E.C. (cm) | 0 |
| Return loss (dB) | 20 |
| R.C.Phase (°) | 0 |

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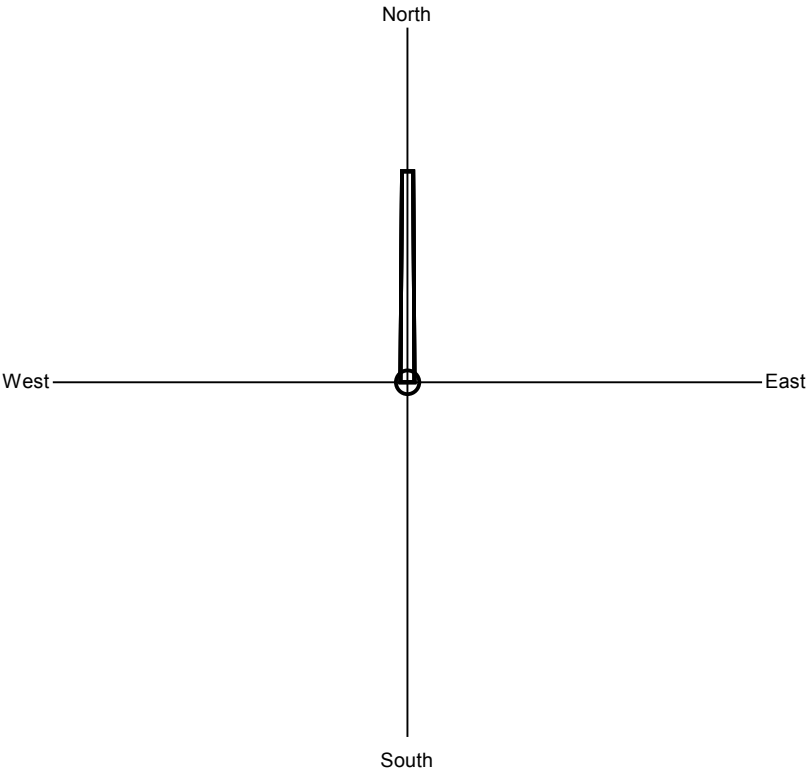
Geometr. and electrical data of Antenna System

| | <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 | 25.000 | 0 | 0 | 0 +0.0 | 3.90 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 2 | 25.000 | 0 | 0 | 0 +0.0 | 1.30 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 3 | 25.000 | 0 | 0 | 0 +0.0 | -1.30 | 0.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 4 | 25.000 | 0 | 0 | 0 +0.0 | -3.90 | 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) | 8.18 |
| G. Distribution losses (dB) | 0.00 |
| H. Nominal max gain [F - G] (dBd) | 8.18 |
| I. Compensation losses (dB) | 0.00 |
| J. Effec. max gain [H - I] (dBd) | 8.18 |
| K. Effec. max gain (times) | 6.58 |
| L. Effec. max power [E * K] (KW) | 6.5775 |
| M. Max power depr. angle (°) | 0.0 |
| N. Max power az. angle (°) | 340 |

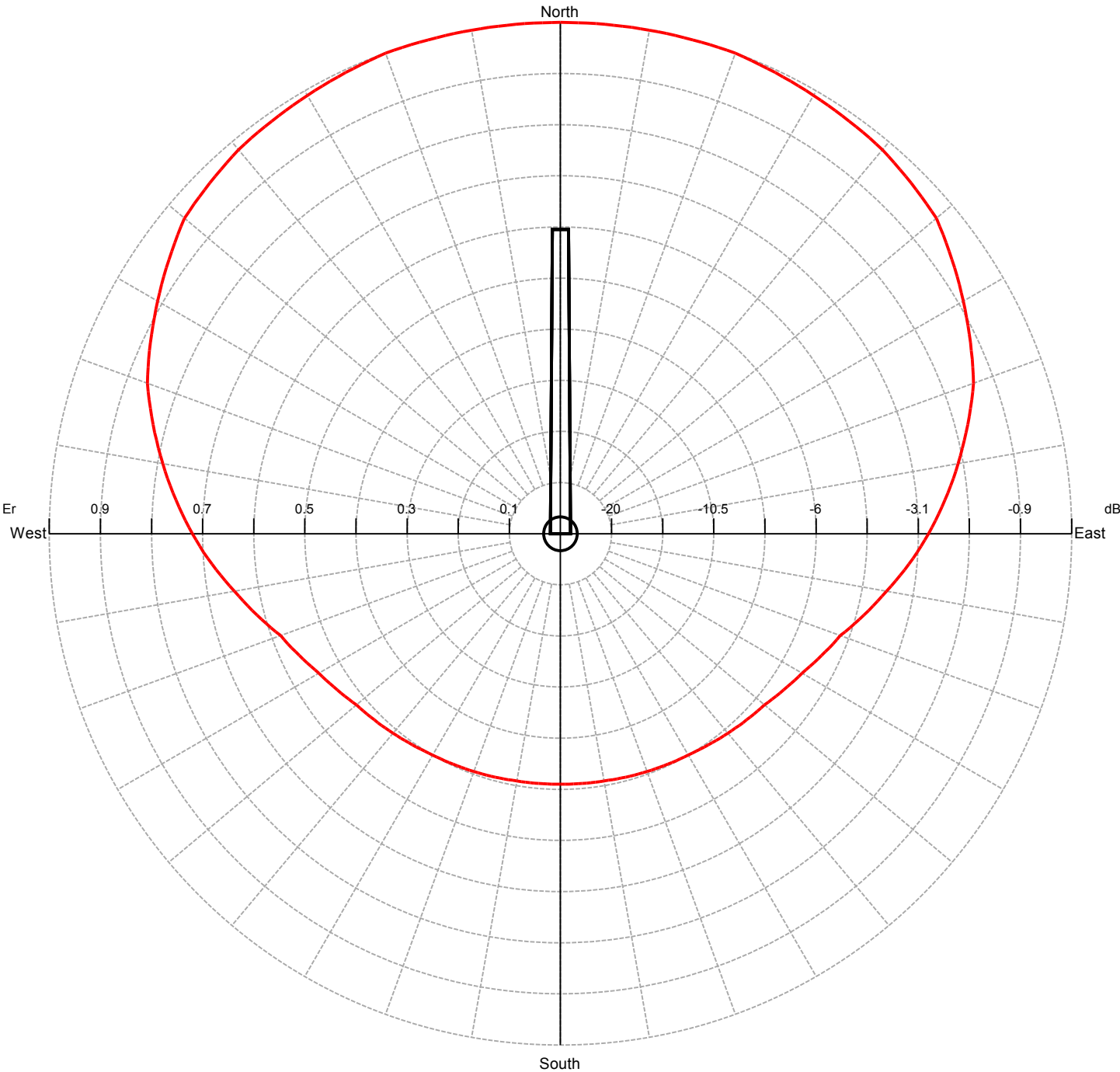
Diagram in dBK calculated at horizon

| Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK |
|-----------|-----|-----------|-----|-----------|-----|-----------|-----|
| 0 | 8.2 | 90 | 5.3 | 180 | 2.0 | 270 | 5.3 |
| 10 | 8.2 | 100 | 4.4 | 190 | 2.0 | 280 | 6.1 |
| 20 | 8.2 | 110 | 3.5 | 200 | 2.1 | 290 | 6.9 |
| 30 | 8.1 | 120 | 2.9 | 210 | 2.2 | 300 | 7.4 |
| 40 | 8.0 | 130 | 2.5 | 220 | 2.3 | 310 | 7.8 |
| 50 | 7.8 | 140 | 2.3 | 230 | 2.5 | 320 | 8.0 |
| 60 | 7.4 | 150 | 2.2 | 240 | 2.9 | 330 | 8.1 |
| 70 | 6.9 | 160 | 2.1 | 250 | 3.5 | 340 | 8.2 |
| 80 | 6.1 | 170 | 2.0 | 260 | 4.4 | 350 | 8.2 |

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Horizontal diagram at 0.0° depres. (Total Antenna)

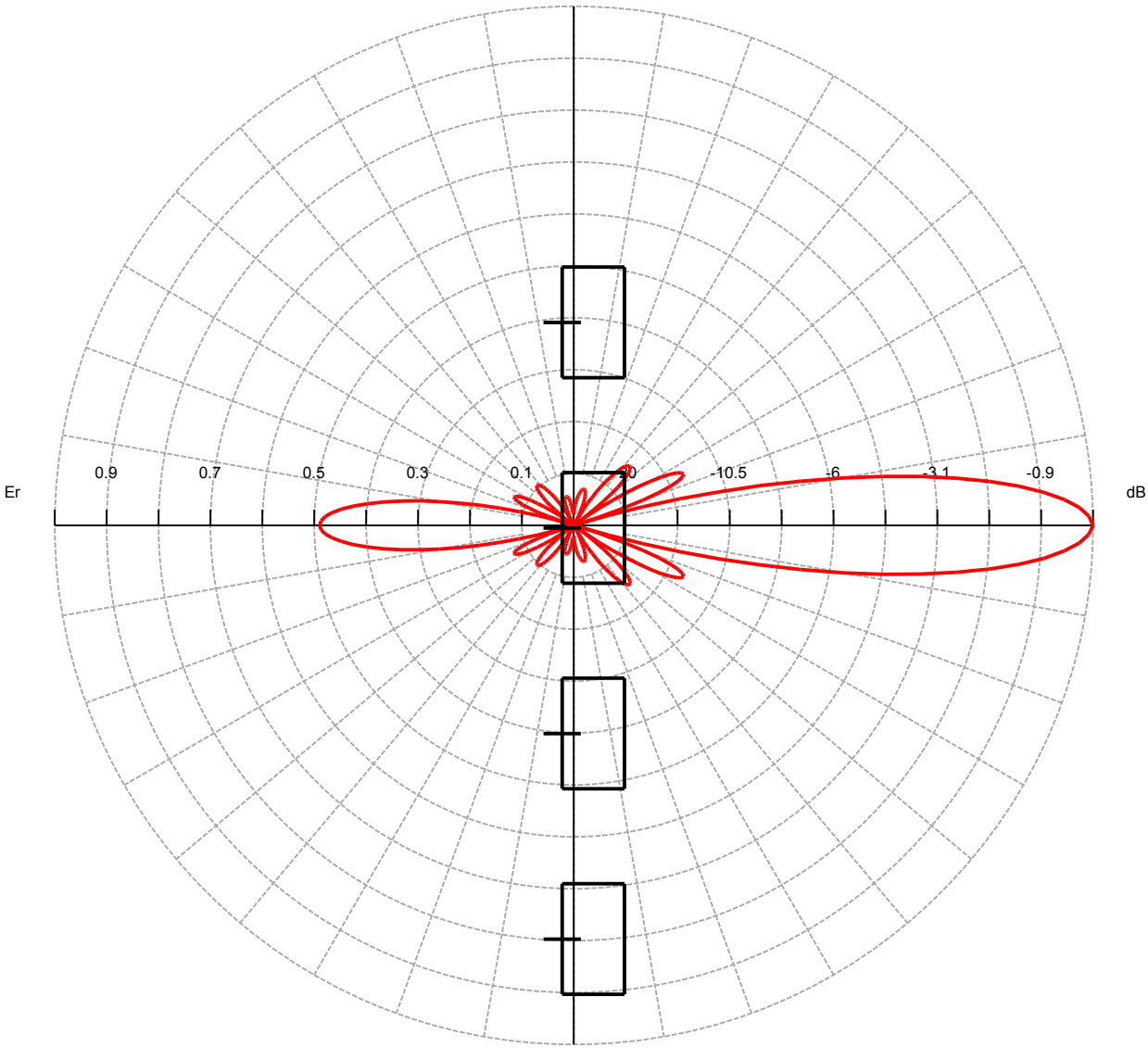


0.0° depres. (Total Antenna), Gain (dBd): 8.18 ERP T.Max(KW): 6.5775 ERP E.Max(KW): 6.5775

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 8.18

ERP T.Max(KW): 6.5775 ERP E.Max(KW): 6.5775