

TX station: 3xAkk2-3dir

Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

| | |
|---|--|
| TX station | 3xAkk2-3dir |
| 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): | 200.0 |
| 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 |

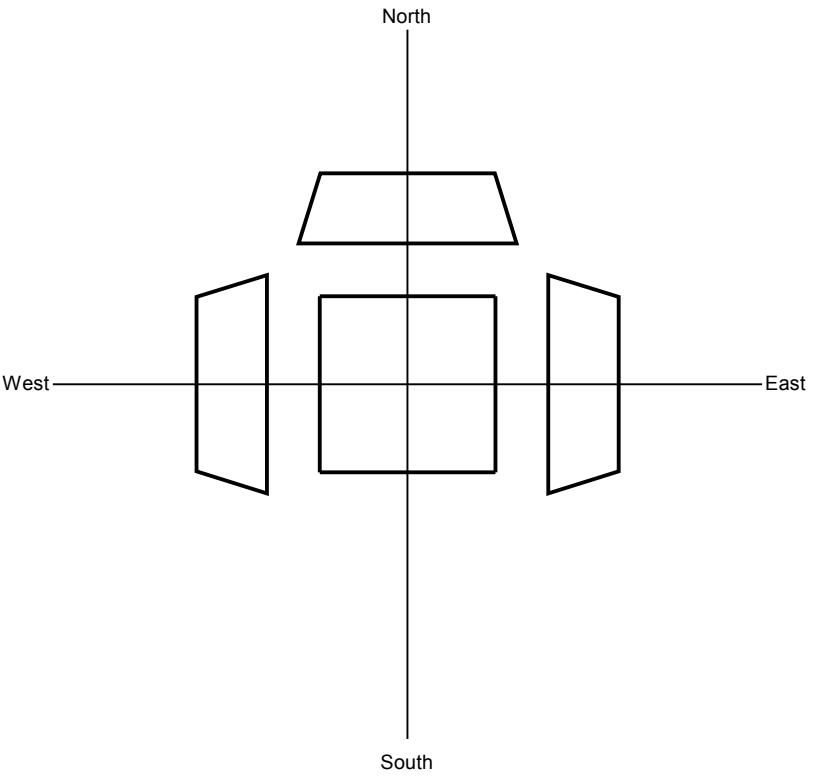
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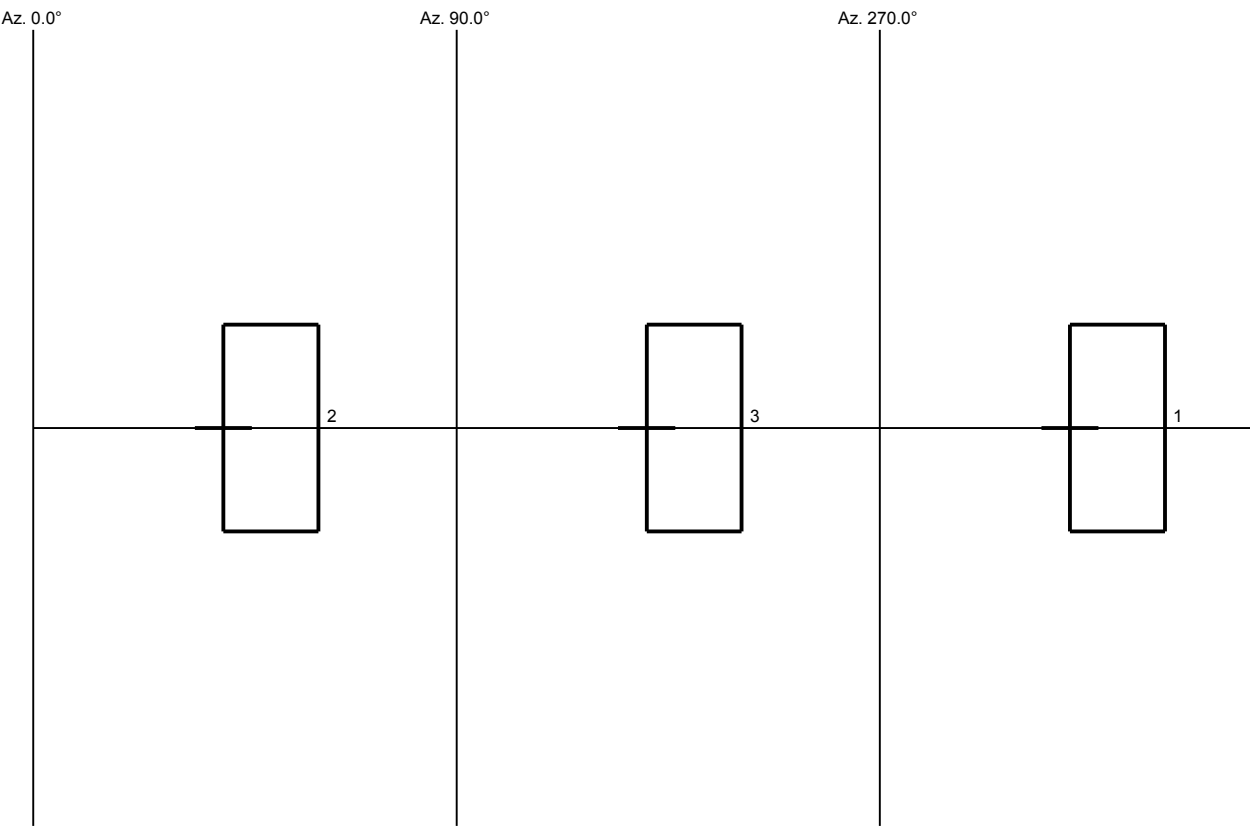
Geometr. and electrical data of Antenna System

| | <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 | 33.333 | 0 | 270 | 0 | +0.0 | 0.00 | 160.0 | 270.0 | 1 | 1 | 0.0 | 0.0 |
| 2 | 33.333 | 0 | 0 | 0 | +0.0 | 0.00 | 160.0 | 0.0 | 1 | 1 | 0.0 | 0.0 |
| 3 | 33.333 | 0 | 90 | 0 | +0.0 | 0.00 | 160.0 | 90.0 | 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 | 270 |
| B. Number of antennas | 1 | 1 | 1 |
| C. Nominal power supply (W) | 333.33 | 333.33 | 333.33 |
| D. Losses (addit. + cables) (dB) | 0.0 | 0.0 | 0.0 |
| E. Effective power supply (W) | 333.33 | 333.33 | 333.33 |
| F. Theor. maximum gain (dBd) | 8.34 | 8.34 | 8.34 |
| G. Distribution losses (dB) | 0.00 | 0.00 | 0.00 |
| H. Nominal max gain [F - G] (dBd) | 8.34 | 8.34 | 8.34 |
| I. Compensation losses (dB) | 0.00 | 0.00 | 0.00 |
| J. Effec. max gain [H - I] (dBd) | 8.34 | 8.34 | 8.34 |
| K. Effec. max gain (times) | 6.83 | 6.83 | 6.83 |
| L. Effec. max power [E * K] (KW) | 2.2769 | 2.2769 | 2.2769 |
| M. Max power depr. angle (°) | -3.0 | -3.0 | -3.0 |
| N. Max power az. angle (°) | 358 | 88 | 268 |

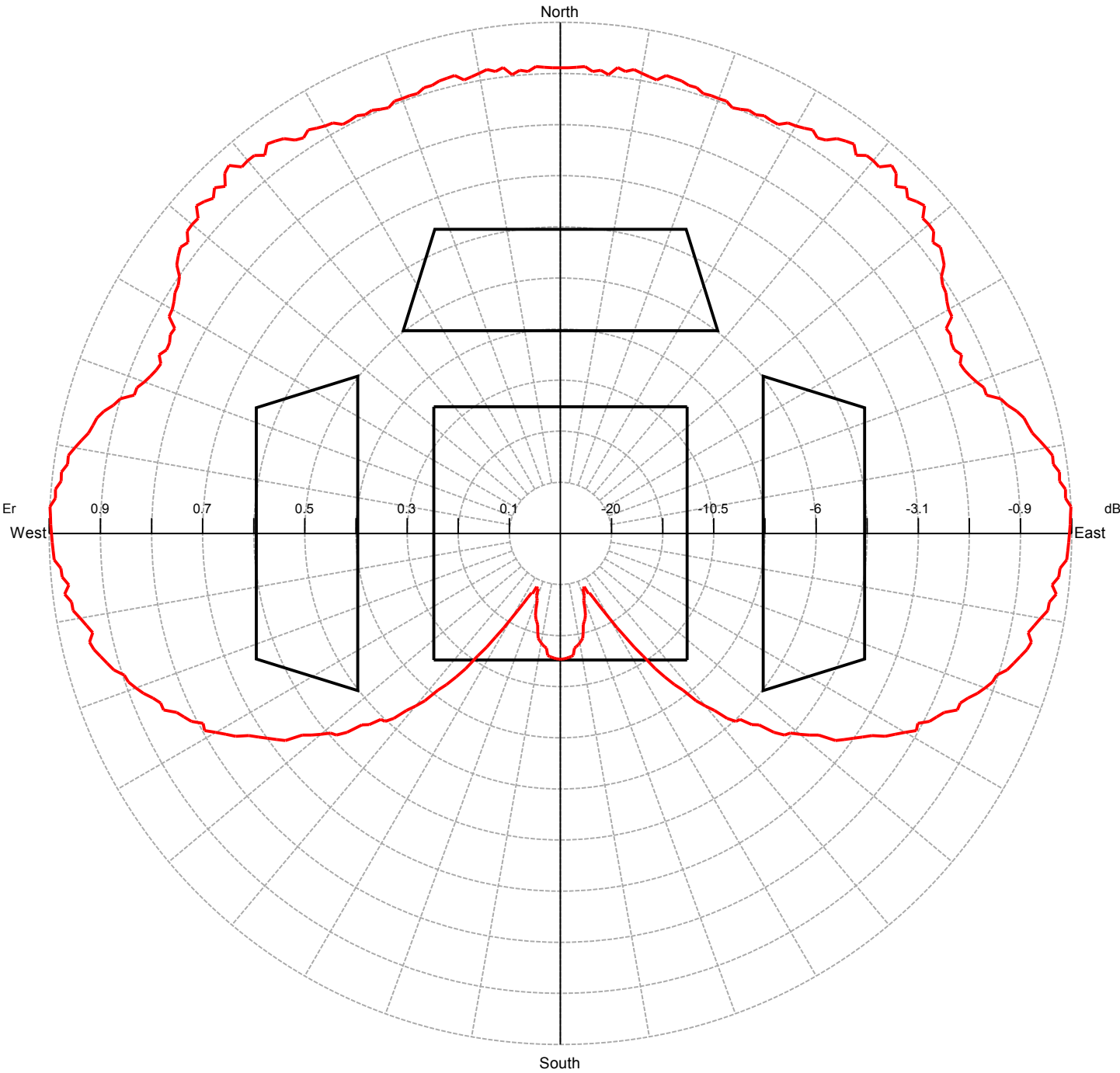
Diagram in dBK calculated at horizon

| Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK | Az. (°/N) | dBK |
|-----------|-----|-----------|-------|-----------|-------|-----------|-----|
| 0 | 1.7 | 90 | 2.5 | 180 | -9.6 | 270 | 2.5 |
| 10 | 1.8 | 100 | 2.1 | 190 | -10.7 | 280 | 2.2 |
| 20 | 1.7 | 110 | 1.5 | 200 | -14.9 | 290 | 1.3 |
| 30 | 1.8 | 120 | 0.4 | 210 | -11.7 | 300 | 1.4 |
| 40 | 2.1 | 130 | -1.7 | 220 | -4.6 | 310 | 2.0 |
| 50 | 2.0 | 140 | -4.6 | 230 | -1.7 | 320 | 2.1 |
| 60 | 1.4 | 150 | -11.7 | 240 | 0.4 | 330 | 1.8 |
| 70 | 1.3 | 160 | -14.9 | 250 | 1.5 | 340 | 1.7 |
| 80 | 2.2 | 170 | -10.7 | 260 | 2.1 | 350 | 1.8 |

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Horizontal diagram at 0.0° depres. (Total Antenna)

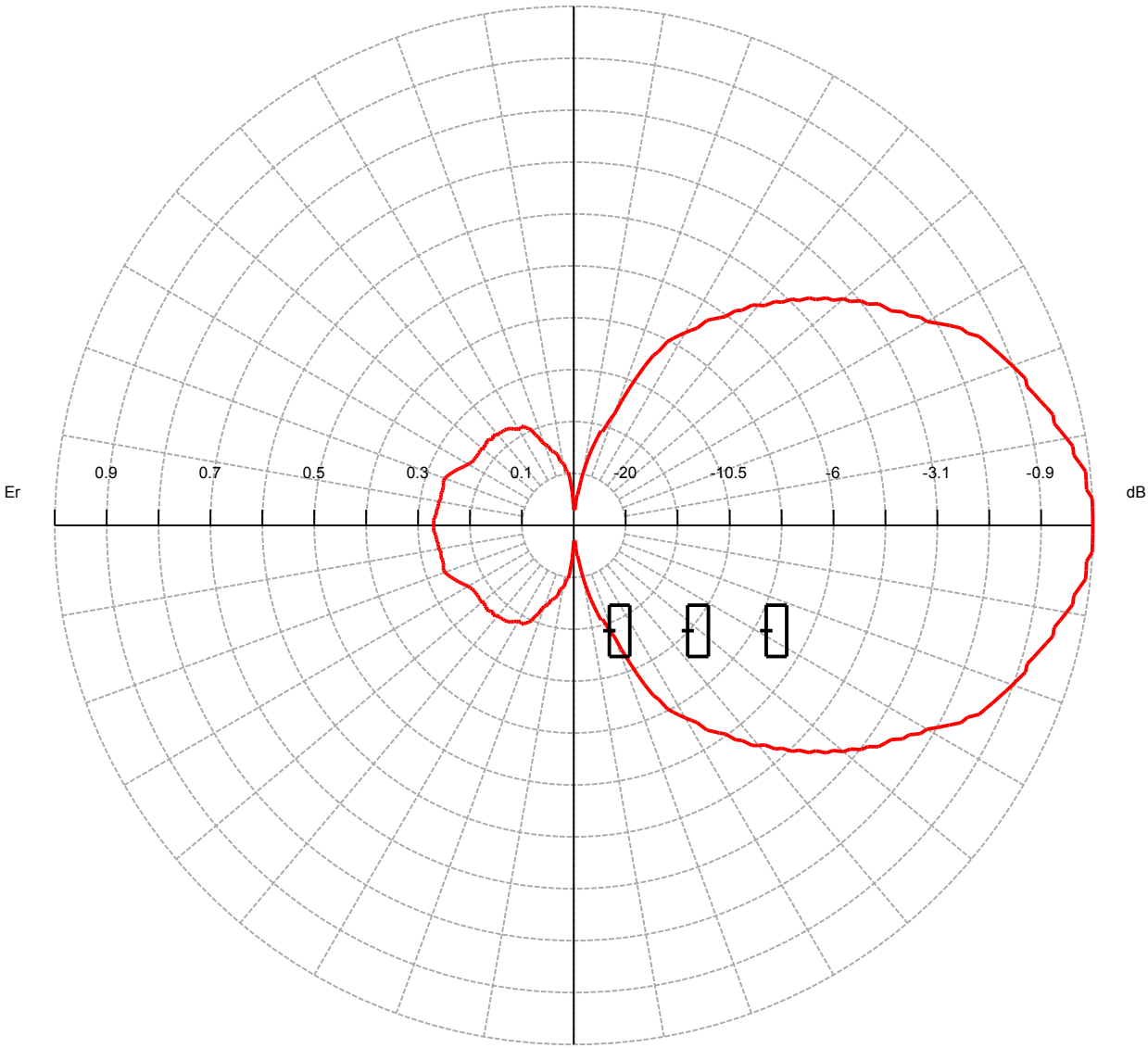


0.0° depres. (Total Antenna), Gain (dBd): 2.55 ERP T.Max(KW): 1.7971 ERP E.Max(KW): 1.7971

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 1.74

ERP T.Max(KW): 1.493 ERP E.Max(KW): 1.493