

TECHNICAL
DOCUMENTATION

Central Wyoming College



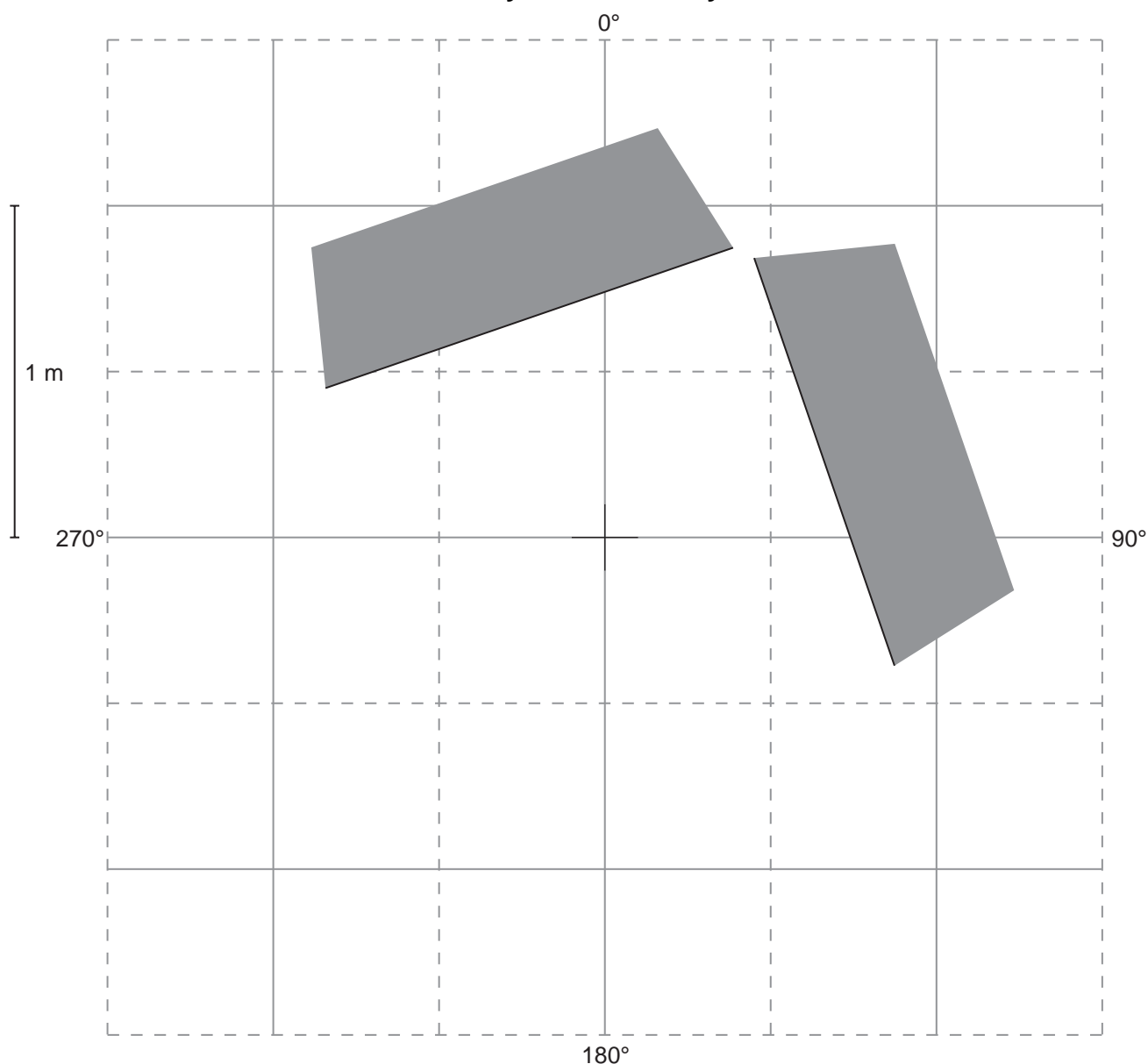
BROADCAST

KPTW

1x2 K523357 H-pol panel
2022.01.28 KBU mj

KATHREIN

System Summary



Sketch Top View, M 1 : 20

Antenna Order No.: 600261

Panels per Bay: 2

Radius: 700 mm

Number of Bays: 1

Verticale Distance: 3360 mm

Physical Aperture: 2800 mm

Harness Loss: .3 dB

Transmission Line: no

Length:

Frequency: 183 MHz

Max ERP:

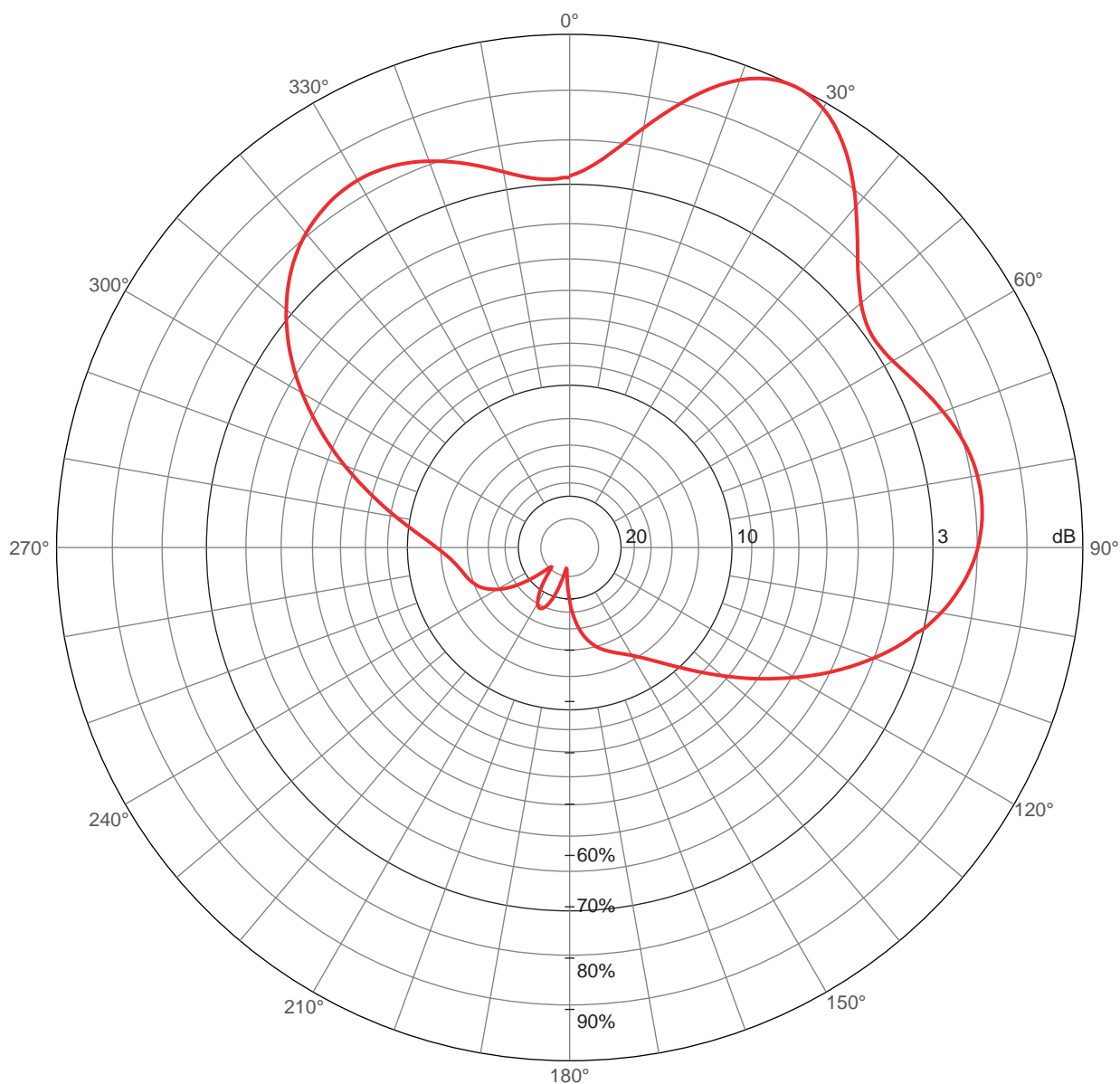
Input Power:

Total Loss: 0.3 dB

Peak Gain: 7.9 dBd

Efficiency: 93.3 %

Azimuthal Pattern (polar-linear)



Antenna, Order No. 600261
Panels per Bay: 2

Frequency: 183 MHz
Azimuthal Directivity: 4.63 dB
Directivity: 8.2 dBd

No.	Azimuth [°]	Radius [mm]	Offset [mm]	Power	Phase [°]
1	341	700	0	1	0
2	71	700	0	1	0

simulation with typical exactness of +/- 8% of max signal

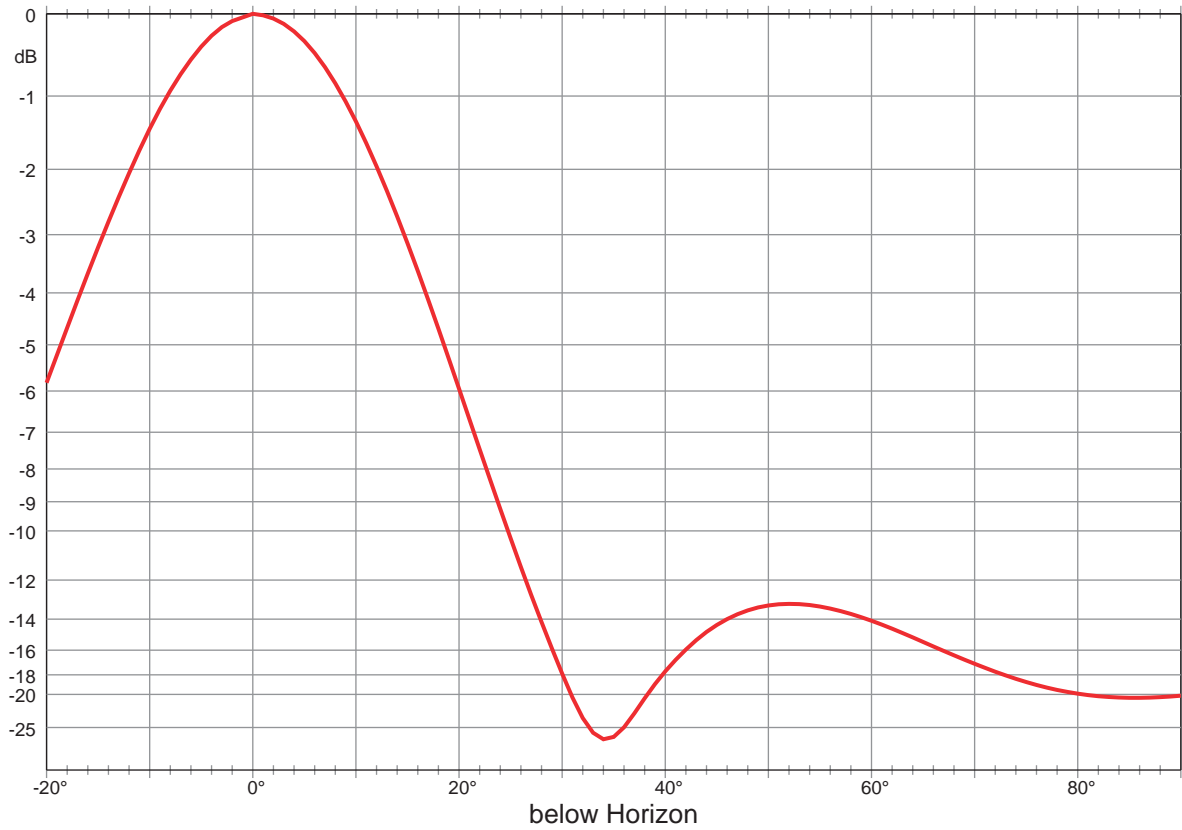
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Date: 2022.01.28
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Elevation Pattern (cartesian-linear)



Antenna, Order No. 600261

Number of Bays: 1

Frequency: 183 MHz

Elevation Directivity: 3.57 dBd

Directivity: 8.2 dBd

Downtilt: 0°

Compensation: 0 %

No.	Vert. Distance [mm]	Power	Phase [°]
1	0	1	0

Subject to alternation

Polarization

H

- Especially suitable for square masts.

Order No.	600261 K523357	601940 K523358	710747
Input	7-16 female	7/8" EIA flange	13-30 female
Max. power	2 kW	3 kW	5 kW
Frequency range	174 – 230 MHz		
VSWR	< 1.1		
Gain (at mid-band)	11 dBd		
Impedance	50 Ω		
Polarization	Horizontal		
Weight	60 kg		
Wind load (at 160 km/h)	Frontal: 1625 N Lateral: 875 N		
Max. wind velocity	225 km/h		

Material: Hot-dip galvanized steel.
Weather protection: Fiberglass.

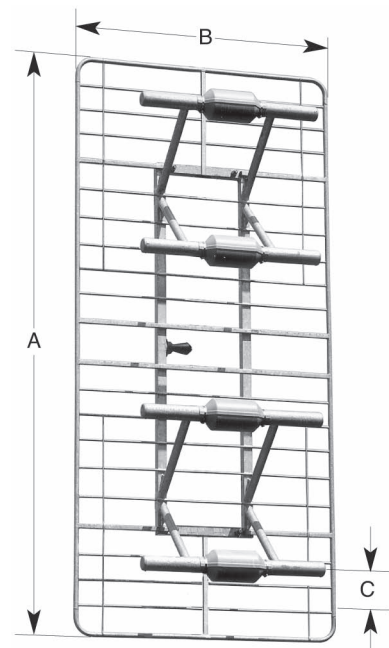
Mounting: By means of the pair of hot-dip galvanized steel clamps:
K611601 to pipes of 77 mm Ø
K611602 to pipes of 60 – 125 mm Ø
(please order separately).
Further mounting hardware and mounting dimensions upon request.

Grounding: Via mounting parts.

Scope of supply: Antenna without mounting clamps.

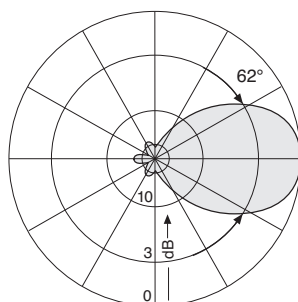
Ice protection: Even under severe icy conditions the antenna is still functional due to its heavy-duty construction and the fiberglass covers for the feeding points.

Combinations: The antenna is especially suitable as a component in arrays to achieve various radiation patterns. Particularly for square masts.

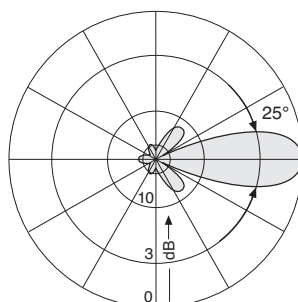


A: 2800 mm
B: 1300 mm
C: 415 mm

Radiation Patterns (at mid-band)



Horizontal Radiation Pattern



Vertical Radiation Pattern