

# Summary – Directional Antennas

## Dual Polarization +45°/–45°

### 800/900

#### Dual Polarization +45°/–45°

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New or changed product

# Panel Dual Polarization Half-power Beam Width

806–960

X

30° / 33°

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Antennen · Electronic

## XPol Panel 806–960 30° 18.5dBi

Type No.	800 10141	
Frequency range	<b>806–960</b>	
	806 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°
Gain	2 x 18 dBi	2 x 18.5 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 31° Vertical: 15°	Horizontal: 29° Vertical: 14°
Front-to-back ratio, copolar	> 25 dB	> 29 dB
Isolation	> 30 dB	> 30 dB
VSWR	< 1.5	< 1.5
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)	
Max. power per input	500 W (at 50 °C ambient temperature)	
Input	2 x 7-16 female	
Connector position	Bottom	
Weight	22 kg	
Wind load (at 150 km/h)	Frontal / lateral / rearside: 680 / 130 / 970 N	
Height/width/depth	1296 / 560 / 116 mm	



## XPol Panel 806–960 33° 21dBi 0°T

Type No.	800 10302		
Frequency range	<b>806–960</b>		
	806 – 866 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 20.2 dBi	2 x 20.4 dBi	2 x 20.8 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 34° Vertical: 8.5°	Horizontal: 33° Vertical: 8.2°	Horizontal: 30° Vertical: 7.5°
Sidelobe suppression for: first sidelobe above horizon	> 15 dB	> 15 dB	> 15 dB
sector 0°–30° above horizon	> 15 dB	> 15 dB	> 15 dB
Front-to-back ratio, copolar	> 24 dB	> 24 dB	> 24 dB
Isolation	> 30 dB	> 30 dB	> 30 dB
Crosspolar ratio Maindirection 0°	> 25 dB	> 25 dB	> 25 dB
VSWR	< 1.5	< 1.5	< 1.5
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside, pointing downwards		
Weight	30 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 1275 / 260 / 1750 N		
Height/width/depth	2254 / 527 / 99 mm		



**Panel**  
**Dual Polarization**  
**Half-power Beam Width**

806–960

X

30°

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800/900  
 XPol

**XPol Panel 806–960 30° 20.5dBi 0°–10°T**

Type No.	<b>800 10456</b>		
Frequency range	806 – 866 MHz	<b>806–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain at 0° T	2 x 20.0 dBi	2 x 20.2 dBi	2 x 20.5 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	33°	32°	30°
Front-to-back ratio, copolar	> 28 dB	> 29 dB	> 30 dB
Cross polar ratio Maindirection 0°	Typically: 25 dB	Typically: 23 dB	Typically: 20 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.1°	8.8°	8.5°
Electrical tilt	0.5°–10°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0° ... 5° ... 10° T > 16 ... 13 ... 13 dB	0° ... 5° ... 10° T > 18 ... 18 ... 17 dB	0° ... 5° ... 10° T > 18 ... 16 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2x 7-16 female		
Connector position	Rearside, pointing downwards		
Adjustment mechanism	1x, Position bottom, continuously adjustable		
Weight	22 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 1800 / 220 / 2000 N		
Height/width/depth	2254 / 576 / 99 mm		



# Panel Dual Polarization Half-power Beam Width

806–960

X

65°

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## XPoI Panel 806–960 65° 9dBi

Type No.	<b>739 619</b>	
Frequency range	<b>806–960</b>	
	806 – 880 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°
Gain	2 x 8.5 dBi	2 x 9 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 70° Vertical: 70°	Horizontal: 65° Vertical: 68°
Front-to-back ratio, copolar	> 27 dB	> 27 dB
Cross polar ratio Maindirection 0° Sector ±60°	Typically: 25 dB > 10 dB	Typically: 25 dB > 10 dB
Isolation	> 30 dB	
VSWR	< 1.5	
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)	
Max. power per input	350 W (at 50 °C ambient temperature)	
Input	2 x 7-16 female	
Connector position	Bottom or top	
Weight	3 kg	
Wind load (at 150 km/h)	Frontal / lateral / rearside: 40 / 25 / 90 N	
Height/width/depth	256 / 262 / 116 mm	



## XPoI Panel 806–960 65° 12.5dBi

Type No.	<b>739 620</b>	
Frequency range	<b>806–960</b>	
	806 – 880 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°
Gain	2 x 12 dBi	2 x 12.5 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 68° Vertical: 29°	Horizontal: 65° Vertical: 27°
Front-to-back ratio, copolar	> 30 dB	
Isolation	> 30 dB	
VSWR	< 1.5	
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)	
Max. power per input	500 W (at 50 °C ambient temperature)	
Input	2 x 7-16 female	
Connector position	Bottom or top	
Weight	6 kg	
Wind load (at 150 km/h)	Frontal / lateral / rearside: 110 / 60 / 240 N	
Height/width/depth	656 / 262 / 116 mm	



# Panel Dual Polarization Half-power Beam Width

790–960

X

65°

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XPol

## XPol Panel 790–960 65° 15dBi 0°T

Type No.	800 10202		
Frequency range	<b>790–960</b>		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 14.5 dBi	2 x 14.7 dBi	2 x 15 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	68°	65°
Front-to-back ratio (180°±30°)	> 23 dB	> 24 dB	> 25 dB
Cross polar ratio Maindirection 0° Sector ±60°	> 20 dB > 11 dB	> 20 dB > 11 dB	> 20 dB > 11 dB
<b>Vertical Pattern:</b>			
Half-power beam width	14.7°	14.3°	13.2°
Sidelobe suppression for first sidelobe above horizon	> 14 dB	> 15 dB	> 14 dB
Impedance	50 Ω		
Isolation	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
Weight	6.5 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N		
Height/width/depth	1294 / 259 / 99 mm		



## XPol Panel 806–960 65° 15dBi 6°T

Type No.	800 10207		
Frequency range	<b>806–960</b>		
	806 – 866 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 14.5 dBi	2 x 14.7 dBi	2 x 15 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 66° Vertical: 16°	Horizontal: 65° Vertical: 15.7°	Horizontal: 63° Vertical: 14.6°
Electrical tilt	6°, fixed	6°, fixed	6°, fixed
Sidelobe suppression for: first sidelobe above horizon sector 0°–30° above horizon	> 13 dB > 13 dB	> 14 dB > 14 dB	> 16 dB > 14 dB
Front-to-back ratio, copolar	> 30 dB	> 30 dB	> 30 dB
Isolation	> 30 dB	> 30 dB	> 30 dB
Cross polar ratio Maindirection 0° Sector ±60°	Typically: > 20 dB Typically: > 10 dB	Typically: > 20 dB Typically: > 10 dB	Typically: > 20 dB Typically: > 10 dB
VSWR	< 1.3	< 1.3	< 1.3
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
weight	7.5 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N		
Height/width/depth	1294 / 259 / 99 mm		



# Panel

## Dual Polarization

### Half-power Beam Width

790–960

X

65°

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#### XPol Panel 806–960 65° 15dBi 0°–14°T

Type No.	800 10303		
Frequency range	806 – 866 MHz	<b>806–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	14.5 ... 14.5 ... 14.2	14.7 ... 14.7 ... 14.5	15 ... 15.1 ... 14.8
Tilt	0° ... 7° ... 14°	0° ... 7° ... 14°	0° ... 7° ... 14°
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio, copolar	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio			
Maindirection 0°	Typically: 25 dB	Typically: 25 dB	Typically: 25 dB
Sector ±60°	> 10 dB	> 10 dB	> 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	16°	15.5°	15°
Electrical tilt	0°–14°, continuously adjustable		
Sidelobe suppression for first sidelobe above horizon	0° ... 7° ... 14° T 14 ... 14 ... 13 dB	0° ... 7° ... 14° T 15 ... 15 ... 14 dB	0° ... 7° ... 14° T 15 ... 15 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	400 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
Adjustment mechanism	1x, Position bottom, continuously adjustable		
Weight	10 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N		
Height/width/depth	1294 / 259 / 99 mm		



#### XPol Panel 790–960 65° 17dBi 0°T

Type No.	800 10203		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 16.4 dBi	2 x 16.6 dBi	2 x 16.9 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio			
Maindirection 0°	> 22 dB	> 22 dB	> 22 dB
Sector ±30°	> 18 dB	> 18 dB	> 18 dB
Sector ±60°	> 14 dB	> 14 dB	> 14 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.9°	9.5°	8.9°
Sidelobe suppression for first sidelobe above horizon	> 13 dB	> 15 dB	> 15 dB
VSWR	< 1.5	< 1.5	< 1.4
Isolation	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	9.2 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N		
Height/width/depth	1934 / 259 / 99 mm		



# Panel Dual Polarization Half-power Beam Width

790–960

X

65°

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XPol

## XPol Panel 806–960 65° 17dBi 6°T

Type No.	800 10294		
Frequency range	<b>806–960</b>		
	806 – 866 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 16.5 dBi	2 x 16.7 dBi	2 x 17 dBi
Half-power beam width Copolar +45°/–45°	Horizontal: 68° Vertical: 10.2°	Horizontal: 66° Vertical: 10°	Horizontal: 64° Vertical: 9.3°
Electrical tilt	6°, fixed	6°, fixed	6°, fixed
Sidelobe suppression for: first sidelobe above horizon sector 0°–30° above horizon	> 14 dB > 14 dB	> 15 dB > 14 dB	> 15 dB > 14 dB
Front-to-back ratio, copolar	> 30 dB	> 30 dB	> 30 dB
Isolation	> 30 dB	> 30 dB	> 30 dB
Cross polar ratio Maindirection 0° Sector ±60°	Typ. > 20 dB Typ. > 10 dB	Typ. > 20 dB Typ. > 10 dB	Typ. > 20 dB Typ. > 10 dB
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 1.4	< 1.3	< 1.3
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N		
Height/width/depth	1934 / 259 / 99 mm		



## XPol Panel 790–960 65° 16.5dBi 0°–10°T

Type No.	800 10634		
Frequency range	<b>790–960</b>		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain (dBi)	16.2 ... 16.4 ... 16.2	16.3 ... 16.6 ... 16.3	16.6 ... 16.8 ... 16.6
Tilt	0° ... 5° ... 10°	0° ... 5° ... 10°	0° ... 5° ... 10°
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	68°	65°
Front-to-back ratio (180°±30°)	> 24 dB	> 25 dB	> 25 dB
Cross polar ratio Maindirection 0° Sector ±60°	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.9°	9.8°	9.5°
Electrical tilt	0°–10°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam:	0° ... 5° ... 10° T 18 ... 17 ... 17 dB	0° ... 5° ... 10° T 18 ... 18 ... 17 dB	0° ... 5° ... 10° T 18 ... 18 ... 17 dB
Isolation, between ports	> 30 dB		
VSWR	< 1.5		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	400 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	10.5 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N		
Height/width/depth	1934 / 259 / 99 mm		



# Panel

## Dual Polarization

### Half-power Beam Width

790–960

X

65°

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#### XPol Panel 806–960 65° 18dBi 0°T

Type No.	800 10204		
Frequency range	806 – 866 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 17.4 dBi	2 x 17.6 dBi	2 x 17.8 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	66°	64°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio			
Maindirection 0°	> 18 dB	> 19 dB	> 20 dB
Sector ±30°	> 16 dB	> 16 dB	> 17 dB
Sector ±60°	> 10 dB	> 10 dB	> 11 dB
<b>Vertical Pattern:</b>			
Half-power beam width	8.5°	8.3°	7.8°
Sidelobe suppression for: first sidelobe above horizon sector 0°–30° above horizon	> 15 dB > 15 dB	> 15 dB > 15 dB	> 15 dB > 14 dB
VSWR	< 1.5	< 1.4	< 1.4
Isolation	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	10.9 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 400 / 260 / 890 N		
Height/width/depth	2254 / 259 / 99 mm		



#### XPol Panel 790–960 65° 17.5dBi 0°–8°T

Type No.	800 10305		
Frequency range	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	16.8 ... 17 ... 16.7	16.9 ... 17.1 ... 16.9	17.2 ... 17.4 ... 17.1
Tilt	0° ... 4° ... 8°	0° ... 4° ... 8°	0° ... 4° ... 8°
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio, copolar	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio			
Maindirection 0°	Typically: 25 dB	Typically: 25 dB	Typically: 25 dB
Sector ±60°	Typically: > 10 dB	Typically: > 10 dB	Typically: > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.1°	8.8°	8.5°
Electrical tilt	0°–8°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0° ... 2° ... 4° ... 8° T 18 ... 18 ... 18 ... 16 dB	0° ... 2° ... 4° ... 8° T 18 ... 18 ... 18 ... 16 dB	0° ... 2° ... 4° ... 8° T 20 ... 18 ... 17 ... 15 dB
Impedance	50 Ω		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside, pointing downwards		
Adjustment mechanism	1x, Position bottom, continuously adjustable		
Weight	12,6 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 400 / 260 / 890 N		
Height/width/depth	2254 / 259 / 99 mm		





# Panel Dual Polarization Half-power Beam Width

790–960

X

65°

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800/900  
XPol

## XPol Panel 790–960 65° 18dBi 0°T

Type No.	800 10215		
Frequency range	790 – 866 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 17.7 dBi	2 x 17.9 dBi	2 x 18 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio	0°	> 25 dB	> 25 dB
Sector	±60°	> 12 dB	> 12 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.4°	7.2°	6.8°
Sidelobe suppression for first sidelobe above main beam	≥ 14 dB	≥ 15 dB	≥ 15 dB
Null-fill	Typically: –25 dB		
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

## XPol Panel 790–960 65° 18dBi 6°T

Type No.	800 10208		
Frequency range	790 – 866 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 17.7 dBi	2 x 17.9 dBi	2 x 18 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio	0°	> 25 dB	> 25 dB
Sector	±60°	> 10 dB	> 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.4°	7.2°	6.8°
Electrical tilt	6°, fixed		
Sidelobe suppression for first sidelobe above main beam	≥ 16 dB	≥ 17 dB	≥ 17 dB
Null-fill	Typically: –25 dB		
VSWR	< 1.4		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral rear side: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

# Panel

## Dual Polarization

### Half-power Beam Width

790–960

X

65°

# KATHREIN

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#### XPol Panel 790–960 65° 18dBi 9°T

Type No.	800 10214		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	2 x 17.6 dBi	2 x 17.8 dBi	2 x 18 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	69°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio Sector 0° ±60°	> 25 dB > 10 dB	> 25 dB > 10 dB	> 25 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.4°	7.2°	6.8°
Electrical tilt	9°, fixed		
Sidelobe suppression for first sidelobe above main beam	≥ 13 dB	≥ 15 dB	≥ 16 dB
Null-fill	Typically: –25 dB		
VSWR	< 1.4		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral / rear side: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

#### XPol Panel 790–960 65° 17.5dBi 0°–10°T

Type No.	800 10306		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	17.0 ... 17.1 ... 17.0	17.1 ... 17.2 ... 17.1	17.3 ... 17.4 ... 17.3
Tilt	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	66°	65°
Front-to-back ratio (180°±30°)	> 24 dB	> 25 dB	> 25 dB
Cross polar ratio Sector 0° ±60°	Typically: 23 dB Typically: > 10 dB	Typically: 23 dB Typically: > 10 dB	Typically: 25 dB Typically: > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.7°	7.5°	7.3°
Electrical tilt	0.5°–9.5°, continuously adjustable		
Sidelobe suppression – for first sidelobe above main beam	0.5° ... 5° ... 9.5° T ≥ 17 ... 14 ... 14 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 15 ... 15 dB	0.5° ... 5° ... 9.5° T ≥ 20 ... 18 ... 18 dB
Null-fill at 0° tilt	Typically: –25 dB		
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –153 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	14 kg		
Wind load (at 150 km/h)	Frontal / lateral / rear side: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

**Panel  
Dual Polarization  
Half-power Beam Width**

790–960

X

65°

**KATHREIN**  
Antennen · Electronic

800/900  
XPoI

**XPoI Panel 790–960 65° 18dBi 0°–10°T**

Type No.	<b>800 10307</b>		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	17.4 ... 17.5 ... 17.4	17.5 ... 17.6 ... 17.5	17.7 ... 17.9 ... 17.7
Tilt	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	67°	65°
Front-to-back ratio (180°±30°)	> 24 dB	> 25 dB	> 25 dB
Cross polar ratio Sector	0° Typically: 22 dB ±60° Typically: > 10 dB	Typically: 23 dB Typically: > 10 dB	Typically: 25 dB Typically: > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.7°	7.5°	7.3°
Electrical tilt	0.5°–9.5°, continuously adjustable		
Sidelobe suppression – for first sidelobe above main beam	0.5° ... 5° ... 9.5° T ≥ 18 ... 15 ... 15 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 15 ... 15 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 16 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	13 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		



# Panel

## Dual Polarization

### Half-power Beam Width

790–960

X

85°

# KATHREIN

Antennen · Electronic

#### XPol Panel 790–960 85° 13.5dBi 0°–14°T

Type No.	800 10308		
Frequency range	<b>790–960</b>		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	13.2 ... 13.3 ... 13.2 dBi	13.3 ... 13.4 ... 13.3 dBi	13.4 ... 13.5 ... 13.4 dBi°
Tilt	0° ... 7° ... 14°	0° ... 7° ... 14°	0° ... 7° ... 14°
<b>Horizontal Pattern:</b>			
Half-power beam width	86°	85°	83°
Front-to-back ratio (180° ±0°)	> 24 dB	> 24 dB	> 26 dB
Front-to-back ratio (180° ±30°)	> 20 dB	> 22 dB	> 24 dB
Cross polar ratio Sector 0° ±60°	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	16°	15.5°	15°
Electrical tilt	0°–14°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0° ... 7° ... 14° T ≥ 17 ... 16 ... 15 dB	0° ... 7° ... 14° T ≥ 17 ... 17 ... 16 dB	0° ... 7° ... 14° T ≥ 17 ... 16 ... 16 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	9 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N		
Height/width/depth	1294 / 259 / 99 mm		



#### XPol Panel 790–960 85° 15dBi 0°–10°T

Type No.	800 10309		
Frequency range	<b>790–960</b>		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain	14.8 ... 15.0 ... 14.8 dBi	14.9 ... 15.1 ... 14.9 dBi	15.0 ... 15.2 ... 15.0 dBi°
Tilt	0° ... 5° ... 10°	0° ... 5° ... 10°	0° ... 5° ... 10°
<b>Horizontal Pattern:</b>			
Half-power beam width	85°	85°	83°
Front-to-back ratio (180° ±0°)	> 24 dB	> 25 dB	> 26 dB
Front-to-back ratio (180° ±30°)	> 21 dB	> 23 dB	> 24 dB
Cross polar ratio Sector 0° ±60°	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	10.5°	10.2°	10°
Electrical tilt	0°–10°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0° ... 5° ... 10° T ≥ 18 ... 15 ... 14 dB	0° ... 5° ... 10° T ≥ 18 ... 17 ... 16 dB	0° ... 5° ... 10° T ≥ 18 ... 16 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	10.5 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N		
Height/width/depth	1934 / 259 / 99 mm		



# Panel Dual Polarization Half-power Beam Width

790–960

X

85°

# KATHREIN

Antennen · Electronic

## XPol Panel 790–960 85° 17dBi 0°T

Type No.	800 10217		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	16.2 dBi	16.5 dBi	16.8 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	86°	85°	83°
Front-to-back ratio (180° ±0°)	> 25 dB	> 25 dB	> 25 dB
Front-to-back ratio (180° ±30°)	> 23 dB	> 24 dB	> 24 dB
Cross polar ratio Sector 0°	> 20 dB	> 20 dB	> 20 dB
±60°	> 15 dB	> 15 dB	> 13 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.5°	7.3°	7.0°
Sidelobe suppression for first sidelobe above main beam	16 dB	17 dB	16 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

## XPol Panel 790–960 85° 17dBi 6°T

Type No.	800 10218		
Frequency range	790 – 862 MHz	<b>790–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Gain	16.3 dBi	16.5 dBi	16.9 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	86°	85°	83°
Front-to-back ratio (180° ±0°)	> 24 dB	> 25 dB	> 27 dB
Front-to-back ratio (180° ±30°)	> 22 dB	> 23 dB	> 25 dB
Cross polar ratio Sector 0°	Typically: 20 dB	Typically: 20 dB	Typically: 20 dB
±60°	> 14 dB	> 14 dB	> 12 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.6°	7.3°	7.0°
Electrical tilt	6°, fixed		
Sidelobe suppression for first sidelobe above main beam	17 dB	16 dB	16 dB
VSWR	< 1.4		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

# Panel Dual Polarization Half-power Beam Width

790–960

X

85°

**KATHREIN**  
Antennen · Electronic

## XPol Panel 790–960 85° 16dBi 0°–10°T

Type No.	800 10310		
Frequency range	790–960		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	15.8 ... 15.6 ... 15.4 dBi	16.0 ... 15.9 ... 15.8 dBi	16.2 ... 16.2 ... 16.2 dBi°
Tilt	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°
<b>Horizontal Pattern:</b>			
Half-power beam width	86°	85°	83°
Front-to-back ratio (180° ±0°)	> 24 dB	> 24 dB	> 26 dB
Front-to-back ratio (180° ±30°)	> 20 dB	> 22 dB	> 24 dB
Cross polar ratio Sector	Typically: 20 dB 0° ±60° > 10 dB	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	8.1°	7.9°	7.6°
Electrical tilt	0.5°–9.5°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0.5° ... 5° ... 9.5° T ≥ 18 ... 14 ... 14 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 17 ... 16 dB	0.5° ... 5° ... 9.5° T ≥ 17 ... 16 ... 16 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –153 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Bottom		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	14 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

## XPol Panel 790–960 85° 16.5dBi 0°–10°T

Type No.	800 10300		
Frequency range	790–960		
	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	16.2 ... 16.2 ... 15.8 dBi	16.3 ... 16.3 ... 16.1 dBi	16.5 ... 16.6 ... 16.5 dBi°
Tilt	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°	0.5° ... 5° ... 9.5°
<b>Horizontal Pattern:</b>			
Half-power beam width	85°	85°	83°
Front-to-back ratio (180° ±0°)	> 24 dB	> 25 dB	> 26 dB
Front-to-back ratio (180° ±30°)	> 21 dB	> 23 dB	> 24 dB
Cross polar ratio Sector	Typically: 20 dB 0° ±60° > 10 dB	Typically: 20 dB > 10 dB	Typically: 20 dB > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	8°	7.8°	7.6°
Electrical tilt	0.5°–9.5°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0.5° ... 5° ... 9.5° T ≥ 18 ... 15 ... 14 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 17 ... 16 dB	0.5° ... 5° ... 9.5° T ≥ 18 ... 16 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	2 x 7-16 female		
Connector position	Rearside		
Adjustment mechanism	1x, Position bottom continuously adjustable		
Weight	14 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		

# Summary – Directional Antennas 2-Broad-band 800/900

## Dual Polarization +45°/-45°

Type					Type No.	Height [mm]	Connector position	Page
XXPol Panel	824-960	60°	16dBi	0°-10°T	800 10516	2024	rearside	32
	824-960	60°	16dBi	0°-10°T				
XXPol Panel	824-960	65°	17dBi	0°-8°T	800 10517	2631	rearside	33
	824-960	65°	17dBi	0°-8°T				
XXPol Panel	790-960	65°	17.5dBi	0°-8°T	<b>800 10647</b>	2254	rearside	34
	790-960	65°	17.5dBi	0°-8°T				
XXPol Panel	824-960	88°	17dBi	0°-8°T	800 10518	2631	rearside	35
	824-960	88°	17dBi	0°-8°T				

**New or changed product**

When deploying  
2-Broad-band Antennas,  
please also consider using  
special Hybrid Combiners  
(see page 260)

## 2-Multi-band Panel

## Dual Polarization

## Half-power Beam Width

824-960

824-960

X

X

60°

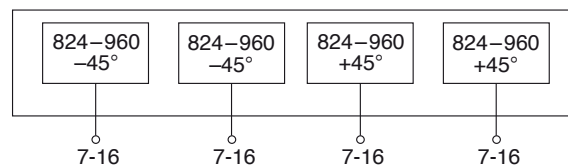
60°

# KATHREIN

Antennen · Electronic

### XXPol Panel 824-960/824-960 60°/60° 16/16dBi 0°-10°/0°-10°T

Type No.	<b>800 10516</b>	
Frequency range	824-960	
	824 - 894 MHz	880 - 960 MHz
Polarization	+45°, -45°; +45°, -45°	+45°, -45°; +45°, -45°
Gain at 0° Tilt	4 x 15.5 dBi	4 x 15.7 dBi
<b>Horizontal Pattern:</b>		
Half-power beam width	60°	58°
Front-to-back ratio	> 25 dB	> 25 dB
Cross polar ratio	Typically: 15 dB	Typically: 16 dB
Sector	0° ±60°	> 10 dB
<b>Vertical Pattern:</b>		
Half-power beam width	9.8°	9.3°
Electrical tilt	0°-10°, continuously adjustable	
Sidelobe suppression for first sidelobe above main beam	0° ... 5° ... 10° T ≥ 14 ... 15 ... 15 dB	0° ... 5° ... 10° T ≥ 14 ... 15 ... 15 dB
VSWR	< 1.5	
Isolation, between ports	Typically: > 25 dB	Typically: > 28 dB
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)	
Max. power per input	500 W (at 50 °C ambient temperature)	
Input	4 x 7-16 female	
Connector position	Rearside, pointing downwards	
Adjustment mechanism	2x, Position bottom continuously adjustable	
Weight	23 kg	
Wind load (at 150 km/h)	Frontal / lateral / rearside: 900 / 410 / 1050 N	
Height/width/depth	2024 / 374 / 169 mm	





## 2-Multi-band Panel

## Dual Polarization

## Half-power Beam Width

824-960
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824-960
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X
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X
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65°
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65°
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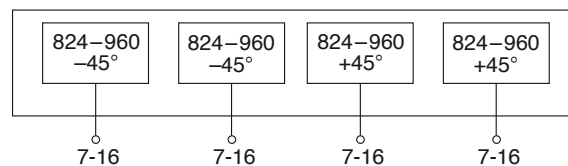
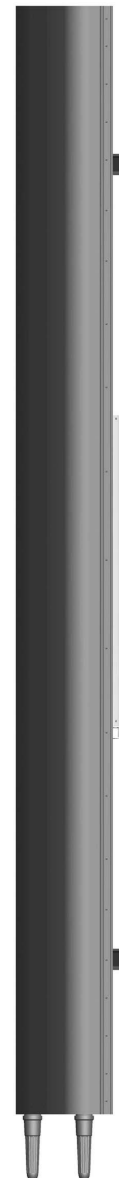
# KATHREIN

Antennen · Electronic

800/900  
XXPol

### XXPol Panel 824-960/824-960 65°/65° 17/17dBi 0°-8°/0°-8°T

Type No.	<b>800 10517</b>					
Frequency range	<table border="1"> <tr> <td colspan="2">824-960</td> </tr> <tr> <td>824 - 894 MHz</td> <td>880 - 960 MHz</td> </tr> </table>		824-960		824 - 894 MHz	880 - 960 MHz
824-960						
824 - 894 MHz	880 - 960 MHz					
Polarization	+45°, -45°; +45°, -45°	+45°, -45°; +45°, -45°				
Gain at 0° Tilt	4 x 16.5 dBi	4 x 16.7 dBi				
<b>Horizontal Pattern:</b>						
Half-power beam width	66°	61°				
Front-to-back ratio	> 25 dB	> 25 dB				
Cross polar ratio	Typically: 16 dB	Typically: 17 dB				
Sector	0° ±60°	> 8 dB > 10 dB				
<b>Vertical Pattern:</b>						
Half-power beam width	7.2°	6.8°				
Electrical tilt	0°-8°, continuously adjustable					
Sidelobe suppression for first sidelobe above main beam	0° ... 4° ... 8° T ≥ 15 ... 15 ... 15 dB	0° ... 4° ... 8° T ≥ 15 ... 16 ... 15 dB				
VSWR	< 1.5					
Isolation, between ports	Typically: > 25 dB	> 28 dB				
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)					
Max. power per input	500 W (at 50 °C ambient temperature)					
Input	4 x 7-16 female					
Connector position	Rearside, pointing downwards					
Adjustment mechanism	2x, Position bottom continuously adjustable					
Weight	28 kg					
Wind load (at 150 km/h)	Frontal / lateral / rearside: 1150 / 500 / 1300 N					
Height/width/depth	2631 / 374 / 169 mm					



# 2-Multi-band Panel

# Dual Polarization

# Half-power Beam Width

790–960

790–960

X

X

65°

65°

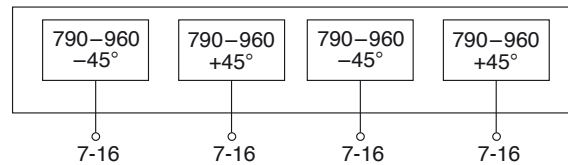
**KATHREIN**

Antennen · Electronic

800/900  
XXPol

## XXPol Panel 790–960/790–960 65°/65° 17.5/17.5dBi 0°–8°/0°–8°T

Type No.	800 10647		
Frequency range	790 – 862 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	+45°, –45°	+45°, –45°	+45°, –45°
Average gain (dBi)	16.9 ... 17.1 ... 17.0	17.0 ... 17.2 ... 17.1	17.3 ... 17.4 ... 17.1
Tilt	0° ... 4° ... 8°	0° ... 4° ... 8°	0° ... 4° ... 8°
<b>Horizontal Pattern:</b>			
Half-power beam width	66°	65°	64°
Front-to-back ratio, copolar	> 25 dB	> 25 dB	> 25 dB
Cross polar ratio			
Maindirection	Typically: 25 dB	Typically: 25 dB	Typically: 25 dB
Sector	Typically: > 10 dB	Typically: > 10 dB	Typically: > 10 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.1°	9.0°	8.5°
Electrical tilt	0°–8°, continuously adjustable		
Sidelobe suppression for first sidelobe above main beam	0° ... 3° ... 6° ... 8° T 18 ... 18 ... 16 ... 15 dB	0° ... 3° ... 6° ... 8° T 18 ... 18 ... 16 ... 15 dB	0° ... 3° ... 6° ... 8° T 18 ... 18 ... 16 ... 15 dB
VSWR	< 1.5		
Isolation, between ports	> 30 dB		
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)		
Max. power per input	400 W (at 50 °C ambient temperature)		
Input	4 x 7-16 female		
Connector position	Rearside		
Adjustment mechanism	2x, Position bottom continuously adjustable		
Weight	24 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 1800 / 220 / 2000 N		
Height/width/depth	2254 / 576 / 99 mm		



## 2-Multi-band Panel

## Dual Polarization

## Half-power Beam Width

824–960

824–960

X

X

88°

88°

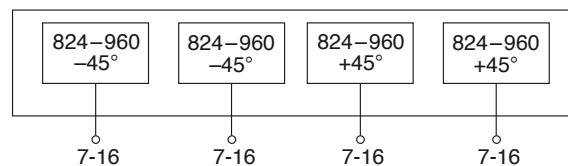
# KATHREIN

Antennen · Electronic

800900  
XXPol

### XXPol Panel 824–960/824–960 88°/88° 17/17dBi 0°–8°/0°–8°T

Type No.	800 10518	
Frequency range	824–960 824 – 894 MHz      880 – 960 MHz	
Polarization	+45°, –45°; +45°, –45°	+45°, –45°; +45°, –45°
Gain at 0° Tilt	4 x 16.5 dBi	4 x 17 dBi
<b>Horizontal Pattern:</b>		
Half-power beam width	88°	85°
Front-to-back ratio	> 25 dB	> 25 dB
Cross polar ratio Sector	0° Typically: 15 dB ±60° > 10 dB	Typically: 15 dB > 10 dB
<b>Vertical Pattern:</b>		
Half-power beam width	7.2°	6.8°
Electrical tilt	0°–8°, continuously adjustable	
Sidelobe suppression for first sidelobe above main beam	0° ... 4° ... 8° T ≥ 15 ... 15 ... 15 dB	0° ... 4° ... 8° T ≥ 16 ... 16 ... 15 dB
VSWR	< 1.5	
Isolation, between ports	Typically: > 25 dB	> 28 dB
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)	
Max. power per input	500 W (at 50 °C ambient temperature)	
Input	4 x 7-16 female	
Connector position	Rearside, pointing downwards	
Adjustment mechanism	2x, Position bottom continuously adjustable	
Weight	28 kg	
Wind load (at 150 km/h)	Frontal / lateral / rearside: 1150 / 500 / 1300 N	
Height/width/depth	2631 / 374 / 169 mm	





# Summary – Directional Antennas Vertical Polarization 800/900

## Vertical Polarization – 800/900

Type	Type No.	Height [mm]	Connector position	Page				
VPol Panel	870–960	20°	16.5dBi	0°T	735 727	492	bottom	38
Dual Yagi	870–960 1710–2170	C 30° 23°	16.5dBi 19.5dBi	0°T 0°T	<b>800 10658</b>	1100	rearside	81
VPol LogPer	790–960	51°	12dBi	0°T	K 73 22 67	300	bottom	39
VPol Panel	860–960	65°	9dBi	0°T	730 677	264	bottom or top	40
VPol Panel	806–960	65°	15.5dBi	0°T	<b>730 368</b>	1294	bottom	40
VPol Panel	806–960	65°	15.5dBi	6°T	732 691	1294	bottom	41
VPol Panel	806–960	65°	17dBi	0°T	<b>730 691</b>	1934	rearside	41
VPol Panel	870–960	65°	17dBi	9°T	737 547	1934	rearside	42
VPol Panel	806–960	65°	18.5dBi	0°T	<b>730 376</b>	2574	rearside	42
VPol Panel	870–960	65°	18.5dBi	6°T	732 689	2574	rearside	43
VPol Panel	872–960	90°	7.5dBi	0°T	736 854	262	bottom or top	44
VPol Panel	806–960	90°	17dBi	0°T	<b>730 378</b>	2574	rearside	44
VPol Panel	870–960	120°	16dBi	0°T	730 382	2574	rearside	45

**Additional versions on request**

**New or changed product**

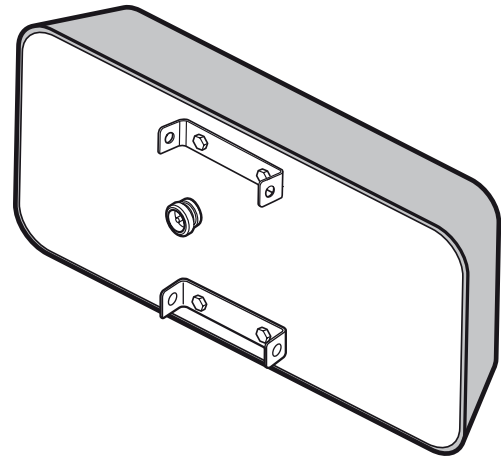
**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

870–960
V
20°

800/900  
 VPoI

**VPoI Panel 870–960 20° 16.5dBi**

Type No.	<b>735 727</b>
Input	7-16 female
Frequency range	870 – 960 MHz
VSWR	< 1.3
Gain	16.5 dBi
Polarization	Vertical
Front-to-back ratio	> 24 dB
Half-power Beam Width	H-plane: 20°/ E-plane: 33°
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Weight	10 kg
Wind load	Frontal: 500 N (at 150 km/h) Lateral: 110 N (at 150 km/h) Rearside: 715 N (at 150 km/h)
Height/width/depth	492 / 992 / 190 mm



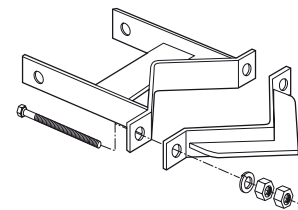
**Material:** Radiator: Aluminum.  
 Reflector screen: Weather-proof aluminum.  
 Radome: Fiberglass, colour: White.  
 All screws and nuts: Stainless steel.

**Ice protection:** Due to the very sturdy antenna construction and the protection of the radiating system by the radome, the antenna remains operational even under icy conditions.

**Grounding:** All metal parts of the antenna as well as the inner conductor are DC grounded.

**Accessories (order separately)**

Type No.	Description	Remarks
K 61 14 02	2 clamps	Mast: 60 – 115 mm diameter
K 61 14 03	2 clamps	Mast: 115 – 210 mm diameter
K 61 14 04	2 clamps	Mast: 210 – 380 mm diameter
K 61 14 05	2 clamps	Mast: 380 – 521 mm diameter



K 61 14 03

**Logarithmic periodic  
Vertical Polarization  
Half-power Beam Width**

790–960

V

51°

**VPol LogPer 790–960 51° 12dBi**

Type No.	<b>K 73 22 67</b>
Input	7-16 female
Frequency range	790 – 960 MHz
VSWR	< 1.4
Gain	12 dBi
Polarization	Vertical
Side-lobe suppression	> 25 dB
Front-to-back ratio	> 30 dB
Half-power Beam Width	Horizontal: 51°/ Vertical: 45°
Intermodulation IM3	< –150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Weight	6.3 kg
Wind load	Frontal: 20 N (at 150 km/h) Lateral: 260 N (at 150 km/h) Rearside: 30 N (at 150 km/h)
Height/width/depth	300 / 155 / 785 mm



800/900  
VPol

- Material:** Radiator: Weather-proof aluminum.  
Reflector screen: Weather-proof aluminum.  
Radome: Fiberglass, colour: Grey.  
All screws and nuts: Stainless steel.
- Mounting:** The antenna can be mounted on tubular mast with a diameter of 30 – 70 mm with supplied clamps.
- Ice protection:** Due to the very sturdy antenna construction and the protection of the radiating system by the radome, the antenna remains operational even under icy conditions.
- Grounding:** All metal parts of the antenna as well as the inner conductor are DC grounded.

**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

806–960

V

65°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 860–960 65° 9dBi**

Type No.	<b>730 677</b>
Frequency range	860 – 960 MHz
Polarization	Vertical
Gain	9 dBi
Half-power beam width	H-plane: 65° E-plane: 70°
Front-to-back ratio	> 25 dB (890 – 960 MHz) > 20 dB (860 – 890 MHz)
VSWR	< 1.3
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	350 W (at 50 °C ambient temperature)
Input	N female
Connector position	Bottom or top
Weight	1.2 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 40 / 25 / 90 N
Height/width/depth	264 / 258 / 103 mm



**VPol Panel 806–960 65° 15.5dBi**

Type No.	<b>730 368</b>		
Frequency range	806 – 866 MHz	<b>806–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	Vertical		
Gain	15.0 dBi	15.2 dBi	15.5 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
<b>Vertical Pattern:</b>			
Half-power beam width	14°	13.5°	13°
VSWR	< 1.5		
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	7-16 female		
Connector position	Bottom		
Weight	6 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N		
Height/width/depth	1294 / 259 / 99 mm		





**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

806–960

V

65°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 806–960 65° 15.5dBi 6°T**

Type No.	<b>732 691</b>
Frequency range	806 – 960 MHz
Polarization	Vertical
Gain	15.5 dBi
Half-power beam width	H-plane: 65° E-plane: 13°
Electrical downtilt	6°, fixed
Front-to-back ratio	> 25 dB
VSWR	< 1.3
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Input	7-16 female
Connector position	Bottom
Weight	6 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 220 / 140 / 490 N
Height/width/depth	1294 / 258 / 103 mm



806/960  
VPol

**VPol Panel 806–960 65° 17dBi**

Type No.	<b>730 691</b>		
Frequency range	806 – 866 MHz	<b>806–960</b> 824 – 894 MHz	880 – 960 MHz
Polarization	Vertical		
Gain	16.4 dBi	16.7 dBi	17.0 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
<b>Vertical Pattern:</b>			
Half-power beam width	9.5°	9.3°	8.5°
VSWR	< 1.5		
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	7-16 female		
Connector position	Rearside		
Weight	9 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N		
Height/width/depth	1934 / 259 / 99 mm		



**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

806–960

V

65°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 870–960 65° 17dBi 9°T**

Type No.	<b>737 547</b>
Frequency range	870 – 960 MHz
Polarization	Vertical
Gain	17 dBi
Half-power beam width	H-plane: 65° E-plane: 8.5°
Electrical downtilt	9°, fixed
Front-to-back ratio	> 25 dB
VSWR	< 1.3
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Input	7-16 female
Connector position	Rearside
Weight	9 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 340 / 220 / 750 N
Height/width/depth	1934 / 258 / 103 mm



**VPol Panel 806–960 65° 18.5dBi**

Type No.	<b>730 376</b>		
Frequency range	806 – 866 MHz	824 – 894 MHz	880 – 960 MHz
Polarization	Vertical		
Gain	17.9 dBi	18.1 dBi	18.5 dBi
<b>Horizontal Pattern:</b>			
Half-power beam width	68°	67°	65°
Front-to-back ratio (180°±30°)	> 25 dB	> 25 dB	> 25 dB
<b>Vertical Pattern:</b>			
Half-power beam width	7.4°	7.2°	6.8°
Sidelobe suppression for first sidelobe above horizon	> 17 dB	> 17 dB	> 18 dB
VSWR	< 1.5		
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)		
Max. power per input	500 W (at 50 °C ambient temperature)		
Input	7-16 female		
Connector position	Rearside		
Weight	12 kg		
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N		
Height/width/depth	2574 / 259 / 99 mm		



**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

870–960

V

65°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 870–960 65° 18.5dBi 6°T**

Type No.	<b>732 689</b>
Frequency range	870 – 960 MHz
Polarization	Vertical
Gain	18.5 dBi
Half-power beam width	H-plane: 65° E-plane: 6.5°
Electrical downtilt	6°, fixed
Front-to-back ratio	> 25 dB
VSWR	< 1.3
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Input	7-16 female
Connector position	Rearside
Weight	12 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N
Height/width/depth	2574 / 258 / 103 mm



800/900  
VPol

**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

870–960

V

90°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 872–960 90° 7.5dBi**

Type No.	<b>736 854</b>
Frequency range	872 – 960 MHz
Polarization	Vertical
Gain	7.5 dBi
Half-power beam width	H-plane: 90° E-plane: 70°
Front-to-back ratio	> 20 dB
VSWR	< 1.5
Intermodulation IM3	< -140 dBc (2 x 43 dBm carrier)
Max. power	350 W (at 50 °C ambient temperature)
Input	N female
Connector position	Bottom or top
Weight	1.5 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 45 / 20 / 60 N
Height/width/depth	262 / 155 / 49 mm



**VPol Panel 806–960 90° 17dBi**

Type No.	<b>730 378</b>
Frequency range	806 – 960 MHz
Polarization	Vertical
Gain	17 dBi
Half-power beam width	H-plane: 90° E-plane: 6.8°
Front-to-back ratio	> 22 dB
VSWR	< 1.5
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Input	7-16 female
Connector position	Rearside
Weight	10.6 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N
Height/width/depth	2574 / 259 / 99 mm



**Panel**  
**Vertical Polarization**  
**Half-power Beam Width**

870–960

V

90°

**KATHREIN**  
 Antennen · Electronic

**VPol Panel 870–960 120° 16dBi**

Type No.	<b>730 382</b>
Frequency range	870 – 960 MHz
Polarization	Vertical
Gain	16 dBi
Half-power beam width	H-plane: 120° E-plane: 6.5°
Front-to-back ratio	> 20 dB
VSWR	< 1.3
Intermodulation IM3	< -150 dBc (2 x 43 dBm carrier)
Max. power	500 W (at 50 °C ambient temperature)
Input	7-16 female
Connector position	Rearside
Weight	12 kg
Wind load (at 150 km/h)	Frontal / lateral / rearside: 460 / 300 / 1020 N
Height/width/depth	2574 / 258 / 103 mm



800/900  
VPol