ERICSSON

Ericsson Antenna Technology Germany GmbH • Klepperstraße 26 • 83026 Rosenheim • Germany

Kathrein Mobile Communication – now part of Ericsson

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Company Responsible:
Markus Feld

VAT Reg. No.: DE 324 954 029
Tax ID No.: 103/5725/3930

BNP Paribas
IBAN: NL05 BNPA 0227 7141 56
BIC: BNPANL2AXXX

Zum 1. Oktober 2019 ist die Kathrein Mobile Communication die Ericsson Antenna Technology Germany GmbH (im Folgenden auch „EAG"), eine mit Gesellschaftsvertrag vom 16. Januar 2019 neu gegründete Gesellschaft mit beschränkter Haftung (GmbH) nach deutschem Recht mit Sitz in Rosenheim (Geschäftsanschrift: Prinzenallee 21, 40549 Düsseldorf). EAG ist im Handelsregister B des Amtsgerichts Traunstein unter der Nr. HRB 27988 eingetragen und hat ein Stammkapital von derzeit EUR 2.000.000,00. EAG wird vertreten durch den Geschäftsführer Markus Feld. Alleinige Gesellschafterin von EAG ist die Telefonaktiebolaget LM Ericsson (publ), eine börsennotierte Aktiengesellschaft nach schwedischem Recht.

Die neuen Firmendaten lauten seither wie folgt:
Ericsson Antenna Technology Germany GmbH
Klepperstraße 26
83026 Rosenheim, Germany
UST-Ident-Nr: DE 324 954 029
Steuer-Nr.: 103/5725/3930

As of 1 October 2019, Kathrein Mobile Communication is Ericsson Antenna Technology Germany GmbH (hereinafter also referred to as "EAG"), a limited liability company under German law, newly established by articles of association dated 16 January 2019, with its head office in Rosenheim (business address: Prinzenallee 21, 40549 Düsseldorf, Germany). EAG is registered in the commercial register, section B, of Amtsgericht Traunstein (district court Traunstein) under the number HRB 27988 and has a share capital of currently EUR 2,000,000. EAG is represented by managing director Markus Feld. The sole shareholder of EAG is Telefonaktiebolaget LM Ericsson (publ), a listed stock corporation under Swedish law.

The new company data are as follows:
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Klepperstraße 26
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9360000644

Read more at: ericsson.com/en/networks/kathrein

8+1-Port Antenna	P1	P2	P3	P4
Frequency Range	3300–3800	3300–3800	3300–3800	3300–3800
Dual Polarization	X	X	X	X
HPBW	90°	90°	90°	90°
Gain	15.6dBi	15.7dBi	15.7dBi	15.6dBi
Adjust. Electr. DT set by integrated RET	2°–12°	2°–12°	2°–12°	2°–12°

KATHREIN

AISG Antenna Interface Standards Group

8+1-Port Antenna 4HB 0.9m 90° | 4x3300–3800 15.7dBi

Type No.		800250911		
Left side, highband		P1, connector 1–2		
			3300–3800	
Frequency Range	MHz	3300 – 3400	3400 – 3600	3600 – 3800
Gain at mid Tilt	dBi	15.2	15.5	15.6
Gain over all Tilts	dBi	15 ± 0.7	15.1 ± 0.7	15.1 ± 0.7
Horizontal Pattern:				
Azimuth Beamwidth	°	97 ± 5	94 ± 5	89 ± 11.2
Front-to-Back Ratio, Total Power, ± 30°	dB	> 17	> 17	> 16
Vertical Pattern:				
Elevation Beamwidth	°	6.1 ± 0.4	6.0 ± 0.5	5.6 ± 0.5
Electrical Downtilt continuously adjustable	°	2.0 – 12.0		
Tilt Accuracy	°	< 0.5	< 0.4	< 0.5
First Upper Side Lobe Suppression	dB	> 15	> 15	> 14
Upper Side Lobe Suppression, 20° Sector above Main Beam	dB	> 13	> 13	> 12
Cross Polar Isolation	dB	> 23		
Port to Port Isolation	dB	> 23 (P1 // P2 // P3 // P4)		
Max. Effective Power per Port	W	25 (at 50 °C ambient temperature)		
Max. Effective Power Ports P1	W	50 (at 50 °C ambient temperature)		

Values based on NGMN-P-BASTA (version 10.0) requirements.

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Center left side, highband		P2, connector 3–4		
			3300–3800	
Frequency Range	MHz	3300 – 3400	3400 – 3600	3600 – 3800
Gain at mid Tilt	dBi	14.8	15.3	15.7
Gain over all Tilts	dBi	14.5 ± 0.6	14.9 ± 0.7	15.4 ± 0.6
Horizontal Pattern:				
Azimuth Beamwidth	°	104 ± 4	96 ± 8	86 ± 11
Front-to-Back Ratio, Total Power, ± 30°	dB	> 19	> 19	> 20
Vertical Pattern:				
Elevation Beamwidth	°	6.2 ± 0.4	6.1 ± 0.5	5.6 ± 0.5
Electrical Downtilt continuously adjustable	°	2.0 – 12.0		
Tilt Accuracy	°	< 0.4	< 0.3	< 0.4
First Upper Side Lobe Suppression	dB	> 15	> 15	> 14
Upper Side Lobe Suppression, 20° Sector above Main Beam	dB	> 13	> 13	> 12
Cross Polar Isolation	dB	> 23		
Port to Port Isolation	dB	> 23 (P1 // P2 // P3 // P4)		
Max. Effective Power per Port	W	25 (at 50 °C ambient temperature)		
Max. Effective Power Ports P2	W	50 (at 50 °C ambient temperature)		

Values based on NGMN-P-BASTA (version 10.0) requirements.

Center right side, highband		P3, connector 5–6		
			3300–3800	
Frequency Range	MHz	3300 – 3400	3400 – 3600	3600 – 3800
Gain at mid Tilt	dBi	14.8	15.3	15.7
Gain over all Tilts	dBi	14.6 ± 0.7	14.9 ± 0.8	15.4 ± 0.7
Horizontal Pattern:				
Azimuth Beamwidth	°	104 ± 4	96 ± 8	86 ± 11
Front-to-Back Ratio, Total Power, ± 30°	dB	> 19	> 19	> 20
Vertical Pattern:				
Elevation Beamwidth	°	6.2 ± 0.5	6.1 ± 0.5	5.6 ± 0.5
Electrical Downtilt continuously adjustable	°	2.0 – 12.0		
Tilt Accuracy	°	< 0.4	< 0.4	< 0.4
First Upper Side Lobe Suppression	dB	> 15	> 15	> 14
Upper Side Lobe Suppression, 20° Sector above Main Beam	dB	> 13	> 13	> 12
Cross Polar Isolation	dB	> 23		
Port to Port Isolation	dB	> 23 (P1 // P2 // P3 // P4)		
Max. Effective Power per Port	W	25 (at 50 °C ambient temperature)		
Max. Effective Power Ports P3	W	50 (at 50 °C ambient temperature)		

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Right side, highband		P4, connector 7–8		
			3300–3800	
Frequency Range	MHz	3300 – 3400	3400 – 3600	3600 – 3800
Gain at mid Tilt	dBi	15.2	15.5	15.6
Gain over all Tilts	dBi	15.0 ± 0.7	15.1 ± 0.6	15.1 ± 0.7
Horizontal Pattern:				
Azimuth Beamwidth	°	97 ± 5	94 ± 5	89 ± 11
Front-to-Back Ratio, Total Power, ± 30°	dB	> 18	> 17	> 17
Vertical Pattern:				
Elevation Beamwidth	°	6.1 ± 0.4	6.0 ± 0.4	5.7 ± 0.4
Electrical Downtilt continuously adjustable	°	2.0 – 12.0		
Tilt Accuracy	°	< 0.5	< 0.5	< 0.4
First Upper Side Lobe Suppression	dB	> 15	> 15	> 14
Upper Side Lobe Suppression, 20° Sector above Main Beam	dB	> 13	> 13	> 12
Cross Polar Isolation	dB	> 23		
Port to Port Isolation	dB	> 23 (P1 // P2 // P3 // P4)		
Max. Effective Power per Port	W	25 (at 50 °C ambient temperature)		
Max. Effective Power Ports P4	W	50 (at 50 °C ambient temperature)		

Values based on NGMN-P-BASTA (version 10.0) requirements.

Broadcast Beam at mid Tilt				
Frequency Range	MHz	3300 – 3400	3400 – 3600	3600 – 3800
Azimuth 3dB Beamwidth	°	65	65	65
Gain	dB	16.5	16.5	16.5
Gain roll-off at Sector Edge	dB	8	8	8
Cross Polar Ratio (0°)	dB	> 15	> 12	> 10
Front-to-back Ratio	dB	> 21	> 23	> 25
Service Beam at mid Tilt				
0° Direct Beam Gain	dB	20.7	20.8	20.7
0° Direction Beam Horizontal 3dB Beam Width	°	25.1	23.4	21.8
0° Direction Beam Horizontal SLS	dB	> 14	> 14	> 14
0° Direction Beam Cross polar Ratio	dB	> 15	> 13	> 11
0° Direction Beam Front-to-Back Ratio	dB	> 23	> 22	> 23
±30° Direct Beam Gain	dB	20.0	20.1	19.8
±30° Direction Beam Horizontal 3dB Beam Width	°	27.0	25.8	24.8
±30° Direction Beam Horizontal SLS	dB	> 14	> 10	> 5
30° Direction Beam Cross polar Ratio	dB	> 15	> 15	> 15
±30° Direction Beam Front-to-Back Ratio	dB	> 22	> 22	> 21
Multi Beam at mid Tilt				
Horizontal 3dB Beam Width	°	32.7	32.0	31.5
Gain	dB	19.3	19.2	18.9
0° Direction Beam Horizontal SLS	dB	9	7	5

Calibration and electrical parameters		
Coupling factor between each antenna column and cal network	dB	−26 ± 1 (equal power on all)
Max. amplitude tolerance from calibration port to input ports	dB	± 0.5 (within ±45° or −45° Pol Ports)
Max. phase tolerance cal network	°	±10

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Electrical specifications, all ports		
Impedance	Ω	50
VSWR		< 1.5
Return Loss	dB	> 14
Interband Isolation	dB	> 23
Polarization	°	+45, −45
Max. Effective Power for the Antenna	W	200 (at 50 °C ambient temperature)

Values based on NGMN-P-BASTA (version 10.0) requirements.

Mechanical specifications		
Input		8 x 4.3-10 female
CAL		1 x 4.3-10 female
Connector Position		bottom
Adjustment Mechanism		Integrated RET, continuously adjustable
Wind load (at Rated Wind Speed: 150 km/h)	N | lbf	Frontal: 345 | 78 Maximal: 380 | 85
Max. Wind Velocity	km/h mph	241 150
Height / Width / Depth	mm inches	921 / 275 / 103 36.3 / 10.8 / 4.1
Category of Mounting Hardware		M (Medium)
Weight	kg lb	7.0 / 9.2 (clamps incl.) 15.4 / 20.3 (clamps incl.)
Packing Size	mm inches	1150 / 340 / 185 45.3 / 13.4 / 7.3
Scope of Supply		Panel and 2 units of clamps for 42–115 mm | 1.7–4.5 inches diameter

Accessories (order separately if required)

Type No.	Description	Remarks mm | inches	Weight approx. kg | lb	Units per antenna
731651	1 clamp	Mast diameter: 28–60 | 1.1–2.4	0.8 | 1.8	2
85010002	1 clamp	Mast diameter: 110 – 220 | 4.3–8.7	2.7 | 6.0	2
85010003	1 clamp	Mast diameter: 210–380 | 8.3–15.0	4.8 | 10.6	2
737978	1 downtilt kit	Downtilt angle: 0°–20°	2.3 | 5.1	1

Accessories (included in the scope of supply)

738546	1 clamp	Mast diameter: 42–115 | 1.7–4.5	1.1 | 2.4	2
1690002182	IRCU			1

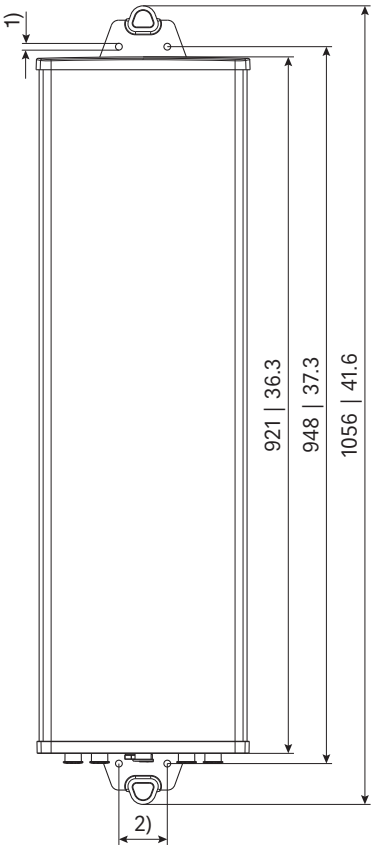
For downtilt mounting use the clamps for an appropriate mast diameter together with the downtilt kit.
Wall mounting: No additional mounting kit needed.

Material:

Reflector screen: Weather-proof aluminum.
Fiberglass housing: It covers totally the internal antenna components. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is light grey.
All screws and nuts: Stainless steel.

Grounding:

The metal parts of the antenna including the mounting kit and the inner conductors are DC grounded.



All dimensions in mm | inches
1) ⌀ 9 | 0.4
2) 64 | 2.5

939.0000054a | ngmn | Subject to alteration.

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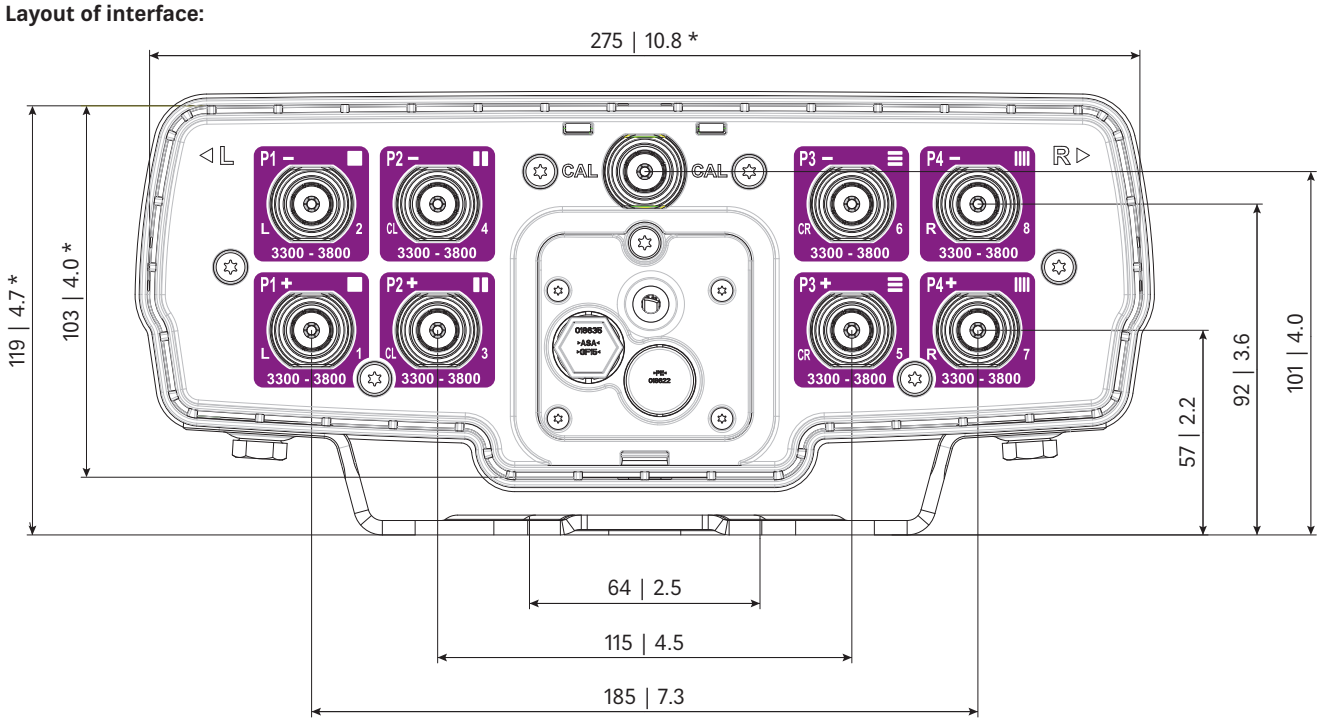
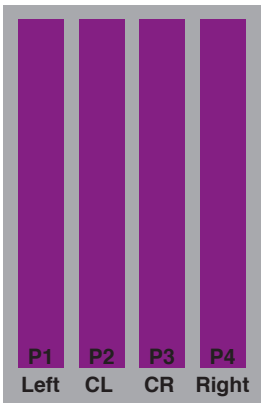
Layout of interface:



Bottom view
* Dimensions refer to radome
All dimensions in mm | inches

Correlation Table

Frequency range	Array	Connector / Ports
3300–3800 MHz	P1	1–2
3300–3800 MHz	P2	3–4
3300–3800 MHz	P3	5–6
3300–3800 MHz	P3	7–8



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