

2-Port Antenna
Frequency Range
Dual Polarization
HPBW

Y1

1710-2690

X

65°

Adjust. Electr. DT

2°-14°

Enhanced Sidelobe Suppression

18dB

Downtilt set by hand or by optional RCU (Remote Control Unit)

KATHREIN



2-Port Antenna 1710-2690 65° 18dBi 2°-14°T ESLS

Type No.		80010621v02			
Highband		Y1			
		1710-2690			
Frequency range	MHz	1710 – 1990	1920 – 2200	2200 – 2490	2490 – 2690
Polarization	°	+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	17.4 ... 17.6 ... 17.5	17.9 ... 18.2 ... 18.1	18.4 ... 18.5 ... 18.5	18.5 ... 19.0 ... 18.5
Tilt	°	2 ... 8 ... 14	2 ... 8 ... 14	2 ... 8 ... 14	2 ... 8 ... 14
Horizontal Pattern:					
Half-power beam width	°	68	63	59	58
Front-to-back ratio (180°±30°)	dB	> 25	> 25	> 25	> 25
Cross polar ratio	0°	Typically: 25	Typically: 24	Typically: 25	Typically: 25
Sector	±60°	> 10	> 10	> 10	> 10
Tracking, Avg.	dB	1.5			
Vertical Pattern:					
Half-power beam width	°°	6.7	6.0	5.3	5.0
Electrical tilt		2-14, continuously adjustable			
Sidelobe suppression	°T	2 ... 8 ... 14	2 ... 8 ... 14	2 ... 8 ... 14	2 ... 8 ... 14
- for first sidelobe above main beam	dB	≥ 18 ... 18 ... 18	≥ 18 ... 18 ... 18	≥ 18 ... 18 ... 18	≥ 18 ... 18 ... 18
- within 0°-20° sector above horizon	dB	≥ 17 ... 17 ... 16	≥ 17 ... 17 ... 16	≥ 17 ... 17 ... 16	≥ 17 ... 17 ... 14
Impedance	Ω	50			
VSWR		< 1.5			
Isolation, between ports	dB	> 30			
Intermodulation IM3	dBc	< -150 (2 x 43 dBm carrier)			
Max. effective power per port	W	250 (at 50 °C ambient temperature)			
Max. effective power for the antenna		500 (at 50 °C ambient temperature)			



Mechanical specifications		
Input	2 x 7-16 female	
Connector position	Bottom	
Adjustment mechanism	1x, Position bottom continuously adjustable	
Wind load (at Rated Wind Speed: 150 km/h)	N lbf	Frontal: 250 57 Maximal: 275 62
Max. wind velocity	km/h mph	200 124
Height/width/depth	mm inches	1452 / 154 / 70 57.2 / 6.0 / 2.8
Category of mounting hardware	M (Medium)	
Weight	kg lb	6.5 / 8.5 (clamps incl.) 4.3 / 18.7 (clamps incl.)
Packing size	mm inches	1725 x 172 x 92 7.9 x 6.8 x 3.6
Scope of supply	Panel and 2 units of clamps for 42-115 mm 1.7-4.5 inches diameter	

936.4870/b Subject to alteration.

All specifications are subject to change without notice.
 The latest specifications are available at www.kathreinusa.com

Accessories

General Information

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° – 15°	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
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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: Aluminum. **Radiator:** Tin-plated zinc.
Flat fiberglass radome: The max. radome depth is only 70 mm [2.8 inches]. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is grey.
All screws and nuts: Stainless steel.

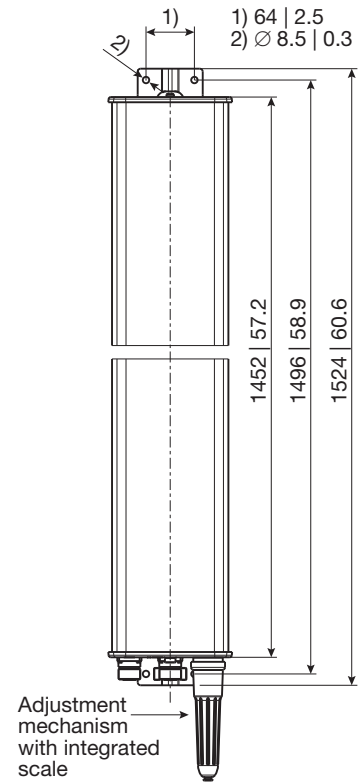
Grounding:

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



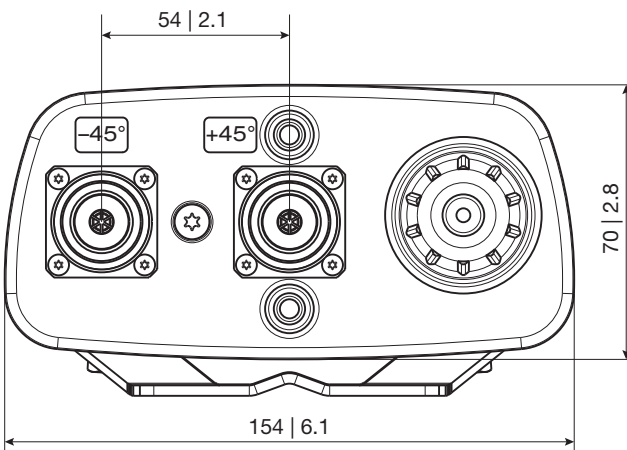
Correlation Table

Frequency range	Array	Connector
1710–2690 MHz	Y1	1–2



All dimensions in mm | inches

Layout of interface:



Bottom view
All dimensions in mm | inches

Any previous data sheet issues have now become invalid.

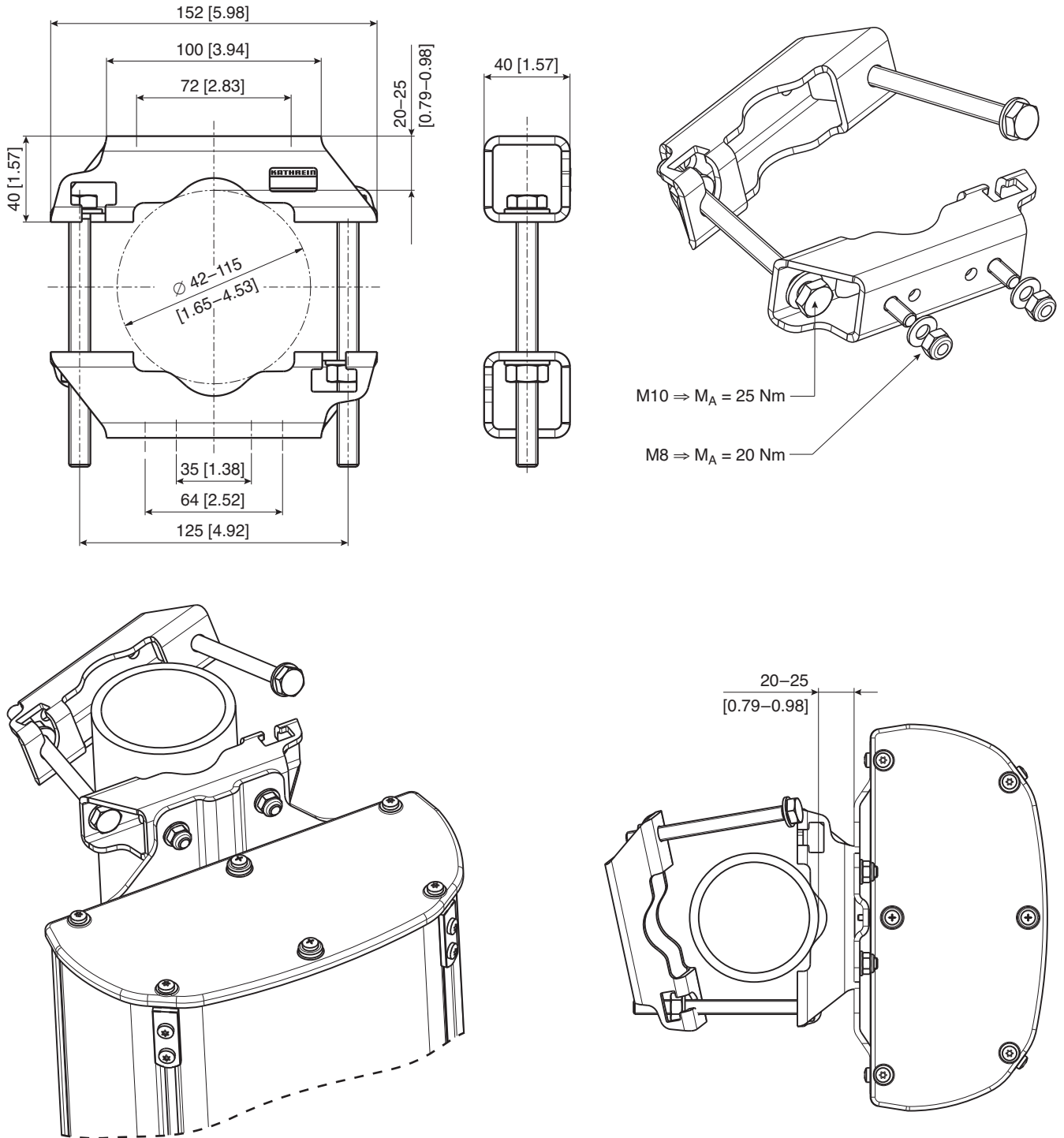
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Mounting Hardware

Clamp Included in the Scope of Supply

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Suitable for mast diameter	(mm) [inches]	42 – 115 [1.65 – 4.53]
Antenna – mast distance	(mm) [inches]	20 – 25 [0.79 – 0.98]
Material of clamp and screws		Hot-dip galvanized steel / stainless steel
Weight	(kg) [lb]	1.1 [2.43]



936.3920/c Subject to alteration.

**Please note: Kathrein does not recommend to use counter nuts.
The additional nuts supplied are only meant as spares.**

All dimensions in mm and [inches]

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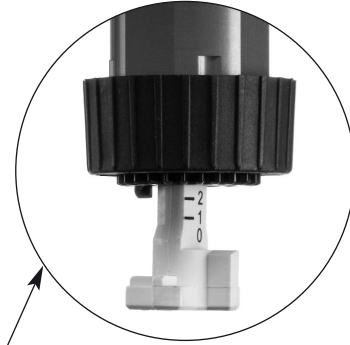
Description of the adjustment mechanism (protective cap removed):



- ① Adjustment wheel with twist-lock function.
- ② Downtilt spindle with integrated scale.



- ① Thread for fixing the protective cap or the RCU (Remote Control Unit).
- ② Gearwheel for RCU power drive.

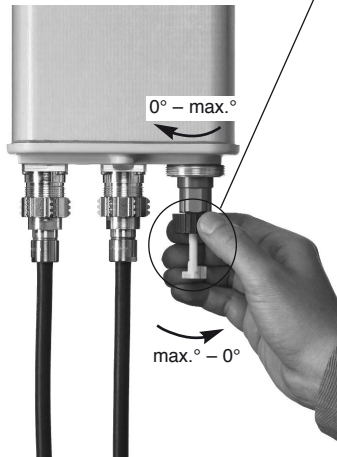


To set the downtilt angle exactly, you must look horizontally at the scale. The lower edge of the gear-wheel must be used for alignment.

Manual adjustment procedure:



Remove the protective cap.



Set downtilt angle by rotating the adjustment wheel.



Screw on the protective cap again.

Optional: RCU (Remote Control Unit) for remote-controlled downtilt adjustment:



936.4020 Subject to alteration.

For a description of RCU installation please refer to the respective data sheet.