

**2-Port Antenna** Y1  
**Frequency Range** 1695-2690  
**Dual Polarization** X  
**HPBW** 35°  
**Adjust. Electr. DT** 2°-10°  
 set by hand or by optional RCU (Remote Control Unit)



**2-Port Antenna 1695-2690 35° 19.5dBi 2°-10°T**

<b>Type No.</b>		<b>80010678</b>				
<b>Highband</b>		<b>Y1, connector 1-2</b>				
		<b>1695-2690</b>				
Frequency Range	MHz	1695 – 1880	1850 – 1990	1920 – 2170	2300 – 2400	2500 – 2690
Gain at mid Tilt	dBi	18.6	19.2	19.4	19.8	19.6
Gain over all Tilts	dBi	18.5 ± 0.4	19.1 ± 0.3	19.4 ± 0.3	19.7 ± 0.5	19.5 ± 0.9
<b>Horizontal Pattern:</b>						
Azimuth Beamwidth	°	43 ± 3.1	39 ± 1.7	38 ± 1.3	36 ± 0.7	33 ± 0.8
Front-to-Back Ratio, Total Power, ± 30°	dB	> 20	> 21	> 23	> 25	> 23
Cross Polar Discrimination at Boresight	dB	> 22	> 23	> 21	> 20	> 11
Cross Polar Discrimination over Sector	dB	> 15.0	> 16.5	> 16.5	> 13.0	> 7.5
<b>Vertical Pattern:</b>						
Elevation Beamwidth	°	7.8 ± 0.5	7.3 ± 0.2	7.1 ± 0.3	6.4 ± 0.3	5.8 ± 0.4
Electrical Downtilt continuously adjustable	°	2.0 – 10.0				
Tilt Accuracy	°	< 0.5	< 0.2	< 0.2	< 0.2	< 0.2
First Upper Side Lobe Suppression	dB	> 19	> 21	> 22	> 20	> 18
Upper Side Lobe Suppression, 20° Sector above Main Beam	dB	> 15	> 19	> 19	> 18	> 14
Cross Polar Isolation	dB	> 28				
Max. Effective Power per Port	W	200 (at 50 °C ambient temperature)				

Values based on NGMN-P-BASTA (version 9.6) requirements.



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Electrical specifications, all systems		
Impedance	$\Omega$	50
VSWR		< 1.5
Return Loss	dB	> 14
Interband Isolation	dB	> 28
Passive Intermodulation	dBc	< -150 (2 x 43 dBm carrier)
Polarization	$^{\circ}$	+45, -45
Max. Effective Power for the Antenna	W	400 (at 50 °C ambient temperature)

Values based on NGMN-P-BASTA (version 9.6) requirements.

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: 410   92 Maximal: 450   101
Max. Wind Velocity	km/h mph	200 124
Height / Width / Depth	mm inches	1272 / 235 / 69 50.1 / 9.3 / 2.7
Category of Mounting Hardware		M (Medium)
Weight	kg lb	9.2 / 11.4 (clamps incl.) 20.3 / 25.1 (clamps incl.)
Packing Size	mm inches	1617 / 257 / 103 63.7 / 10.1 / 4.1
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° – 15°	4.3   9.5	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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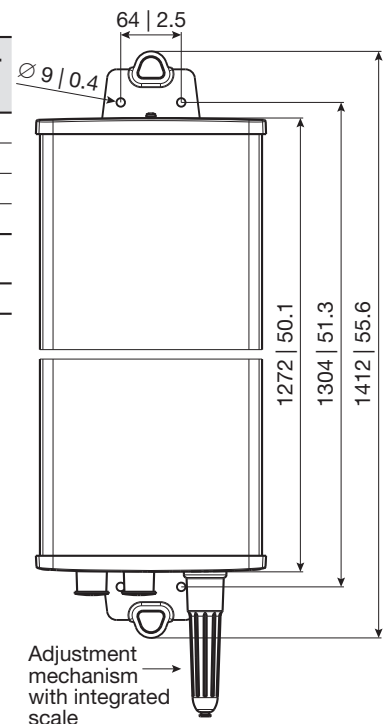
For downtilt mounting use the clamps for an appropriate mast diameter together with the downtilt kit.  
Wall mounting: No additional mounting kit needed.

### Material:

**Reflector screen:** Aluminum. **Radiator:** Tin-plated zinc.  
**Flat fiberglass radome:** 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.



All dimensions in mm | inches

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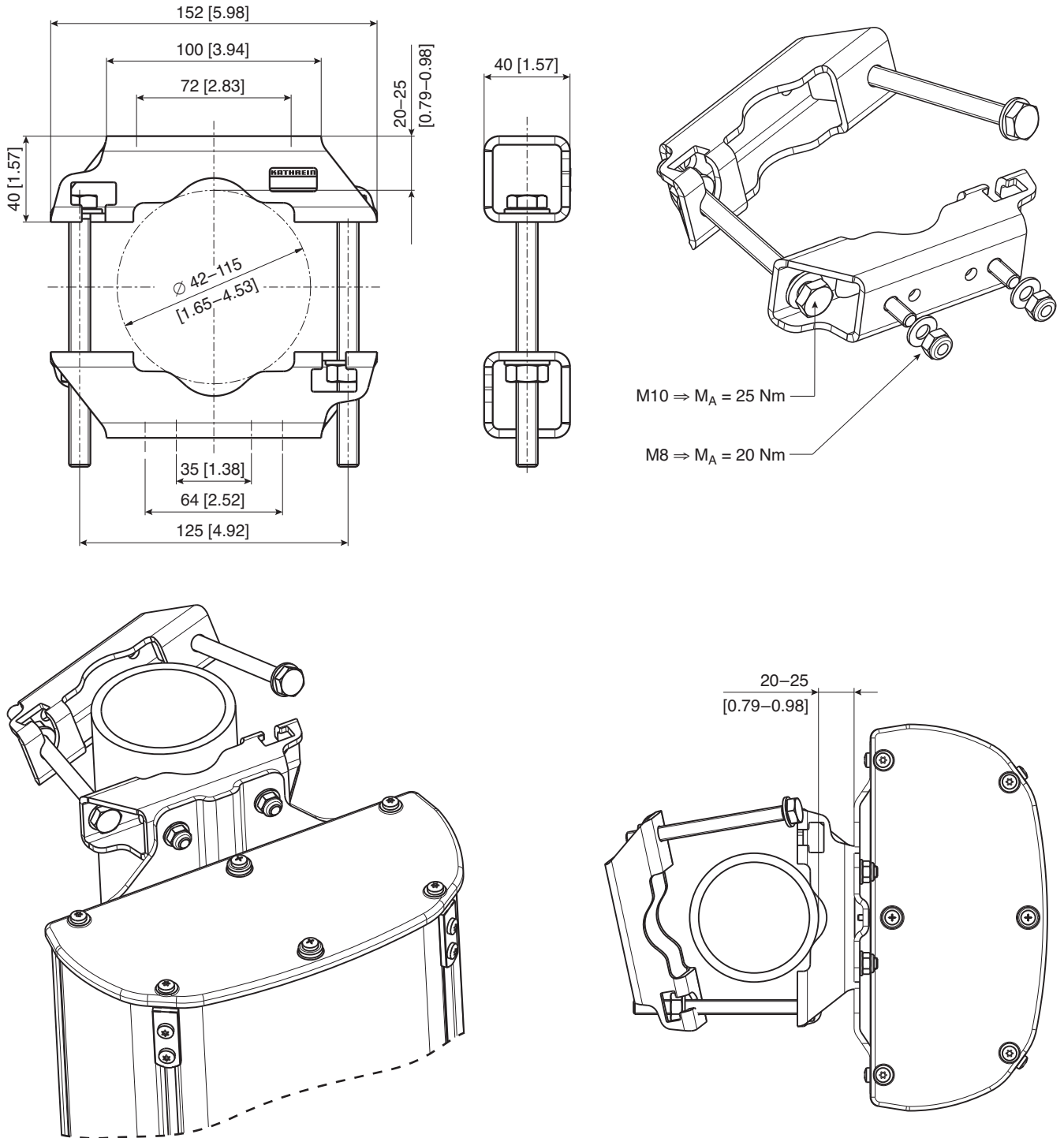


# Mounting Hardware

## Clamp Included in the Scope of Supply

**KATHREIN**

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]

All specifications are subject to change without notice.  
The latest specifications are available at [www.kathreinusa.com](http://www.kathreinusa.com)

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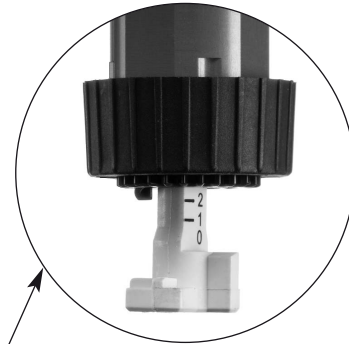
## Description of the adjustment mechanism (protective cap removed):



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

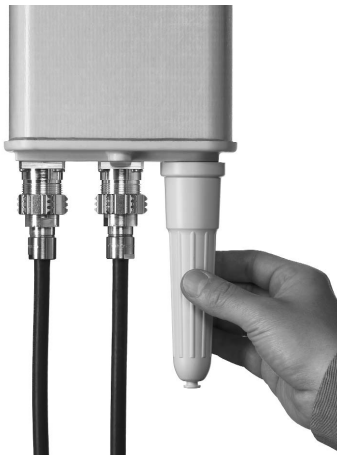


- ① Thread for fixing the protective cap or the RCU (Remote Control Unit).
- ② Gearwheel for RCU power drive.

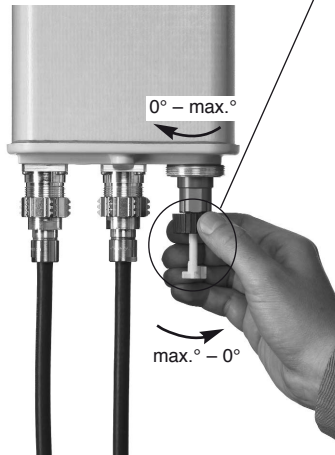


To set the downtilt angle exactly, you must look horizontally at the scale. The lower edge of the gear-wheel must be used for alignment.

## 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:



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