

2-Port Antenna Y1

Frequency Range 1710-2690

Dual Polarization X

HPBW 65°

Adjust. Electr. DT 0°-12°

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



2-Port Antenna 1710-2690 65° 16.5dBi 0°-12°T

Type No.		80010681			
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 at 0° tilt	dBi	15.5	16.3	16.7	16.7
Horizontal Pattern:					
Half-power beam width	°	67	64	60	60
Front-to-back ratio (180°±30°)	dB	> 25	> 25	> 23	> 23
Cross polar ratio	0°	Typically: 25	Typically: 28	Typically: 28	Typically: 28
Sector	±60°	> 10	> 8	> 8	> 11
Vertical Pattern:					
Half-power beam width	°	10.8	9.9	8.8	8.4
Electrical tilt	°	0 – 12, continuously adjustable			
Sidelobe suppression for first sidelobe above main beam	°T	0 ... 6 ... 12	0 ... 6 ... 12	0 ... 6 ... 12	0 ... 6 ... 12
	dB	≥ 12 ... 13 ... 15	≥ 13 ... 14 ... 15	≥ 13 ... 14 ... 16	≥ 15 ... 15 ... 17
Impedance	Ω	50			
VSWR		< 1.5			
Isolation, between ports	dB	> 30			
Intermodulation IM3	dBc	< -150 (2 x 43 dBm carrier)			
Max. power per input	W	250 (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: 140 31 Maximal: 155 35
Max. wind velocity	km/h mph	200 124
Height/width/depth	mm inches	851 / 155 / 70 33.5 / 6.1 / 2.8
Category of mounting hardware	L (Light)	
Weight	kg lb	5 / 5.2 (clamps incl.) 11.0 / 11.5 (clamps incl.)
Packing size	mm inches	1146 x 172 x 92 45.1 x 6.8 x 3.6
Scope of supply	Panel and 1 unit of tension bands for 45 – 125 mm 1.8 – 4.9 inches diameter	

936.4846/a Subject to alteration.

Accessories

General Information

KATHREIN

Accessories (order separately if required)

Type No.	Description	Remarks mm inches	Weight approx. kg lb	Units per antenna
734360	2 tension bands	Mast diameter: 34 – 60 1.3 – 2.4	0.06 0.13	1
734361	2 tension bands	Mast diameter: 60 – 80 2.4 – 3.1	0.07 0.15	1
734362	2 tension bands	Mast diameter: 80 – 100 3.1 – 3.9	0.08 0.18	1
734363	2 tension bands	Mast diameter: 100 – 120 3.9 – 4.7	0.09 0.20	1
734364	2 tension bands	Mast diameter: 120 – 140 4.7 – 5.5	0.11 0.24	1
738546	1 clamp	Mast diameter: 42 – 115 1.7 – 4.5	1.1 2.4	2
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
732327	1 downtilt kit	Downtilt angle: 0° – 15°	1.3 2.9	1

Accessories (included in the scope of supply)

734365	2 tension bands	Mast diameter: 45 – 125 1.8 – 4.9	0.08 0.18	1
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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.

Please note:

Using a downtilt kit is only possible in combination with clamps 731651, 738546, 85010002 or 85010003.

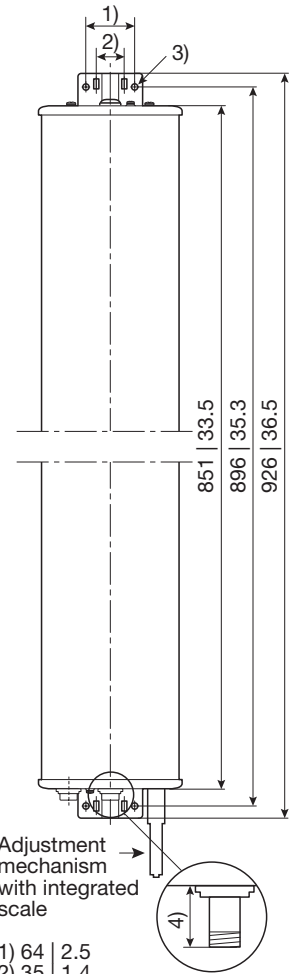
Material:

Reflector screen: Aluminum / tin-plated copper.

Radiator: Tin-plated zinc.

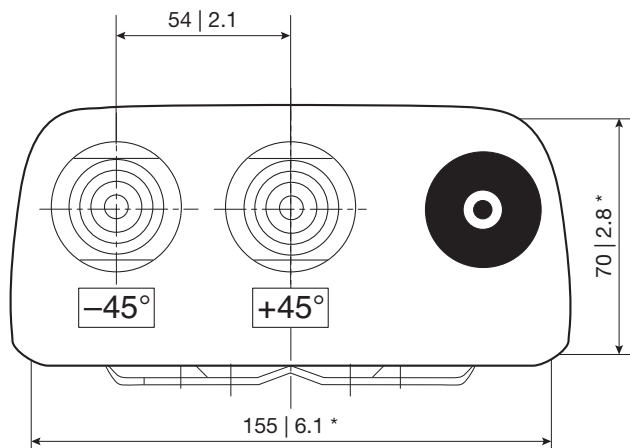
Flat fiberglass radome: The max. radome depth is only 70 mm | 2.8 inches. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is grey.

All screws and nuts: Stainless steel.



All dimensions in mm | inches

Layout of interface:



Bottom view

* Dimensions refer to radome
All dimensions in mm | inches

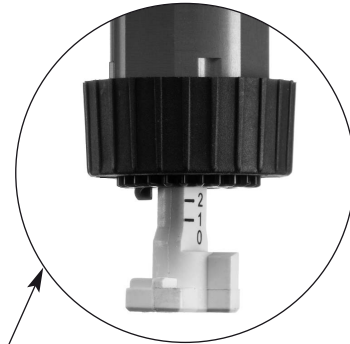
Description of the adjustment mechanism (protective cap removed):



- 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.

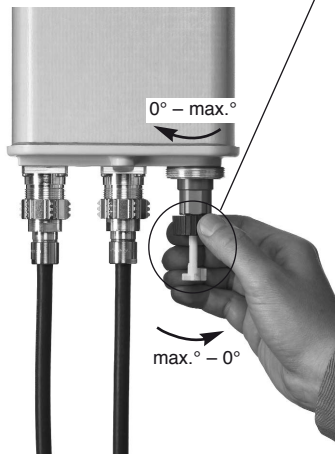


To set the downtilt angle exactly, you must look horizontally at the scale. The lower edge of the gear-wheel must be used for alignment.

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:



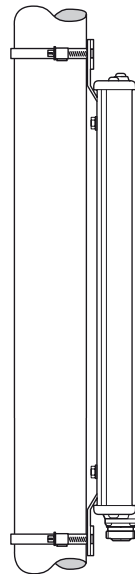
936.4020 Subject to alteration.

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

Mounting Hardware

Tension Bands Included in the Scope of Supply

Suitable for mast diameter	45 – 125 mm
Number of pieces	2 tension bands
Material	Stainless steel
Weight (approx.)	0.08 kg



**Please note:
Only usable without downtilt kit!**

936.4060 Subject to alteration.