

10-Port Antenna  
 Frequency Range  
 Dual Polarization  
 HPBW  
 Adjust. Electrical  
 DT Set by  
 Flex RET

Y1	Y2	P1	P2	O1
1695-2690	1695-2690	3550-3700	3550-3700	5150-5925
X	X	X	X	X
65°	65°	65°	65°	65°
3-15°	3-15°	5.5° fixed	5.5° fixed	12° fixed

**KATHREIN**



10-Port Antenna 1695–2690/1695–2690/3550–3700/3550–3700/5150–5925 65°/65°/65°/65°/ 65°  
 14/14/11/11/5 dBi 3-15°/3-15°/5.5°/5.5°/12° T

Type no.	<b>84010564</b>
----------	-----------------

Specifications		Y1, connector 1-2 Y2, connector 3-4			
		1695–2690			
Frequency range	MHz	1695–1850	1850–2200	2300–2360	2490–2690
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	13.1 +/- 0.4	14 +/- 0.4	14.2 +/- 0.8	14.6 +/- 0.8
<b>Horizontal Pattern:</b>					
Half-power beamwidth	°	73 +/-2	61 +/-2	53 +/-2	48 +/-2
Front-to-Back Ratio, Total Power, ± 30°	dB	24	26	29	27
Cross Polar Discrimination over Sector	dB	10.5	9	5.5	3
<b>Vertical pattern:</b>					
Half-power beamwidth	°	18 +/-1	17 +/-1	16 +/-2	15 +/-2
Electrical tilt	°	3-15	3-15	3-15	3-15
First Upper Side Lobe Suppression	dB	16	21	20	20
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.7
Isolation	Intrasystem Intersystem	> 23 > 28	> 23 > 28	> 23 > 28	> 20 > 28
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)			
Max. power per input	W	150 (at 50°C ambient temperature)			

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

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

84010564 2018-R2.2

Specifications		P1, connector 5-6	P2, connector 7-8
Frequency range	MHz	3550—3700	
Polarization		+45, -45	
Gain	dBi	11 dBi +/-0.5dBi	
<b>Horizontal Pattern:</b>			
Half-power beamwidth	°	65 +/-7	
<b>Vertical pattern:</b>			
Half-power beamwidth	°	27 +/-2	
Electrical tilt	°	5.5 +/-0.5	
Impedance	Ohms	50	
VSWR		< 1.5	
Isolation	Intrasystem Intersystem	dB > 25 > 28	
Intermodulation IM3	dBc	N/A	
Max. power per input	W	100 (at 50°C ambient temperature)	

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

Specifications		O1, connector 9-10				
Frequency range	MHz	5150—5350	5350—5470	5470—5725	5725—5850	5850—5925
Polarization		+45, -45				
Gain (typical/maximum)	dBi	5.3 / 5.84	5.0 / 5.31	5.3 / 5.81	5.3 / 5.81	5 / 5.48
<b>Horizontal Pattern:</b>						
Half-power beamwidth	°	45 +/-7				
<b>Vertical pattern:</b>						
Half-power beamwidth	°	32 +/-4	35 +/-4	30 +/-2	21 +/-2	23 +/-2
Electrical tilt	°	12 +/-6				
Impedance	Ohms	50				
VSWR		< 1.5				
Isolation	Intrasystem Intersystem	dB > 30 > 32				
Intermodulation IM3	dBc	N/A				
Max. power per input	W	2 (at 50°C ambient temperature)				
Max. input power* per radio	W	1	—	—	—	—

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

\*To comply with EIRP restrictions for FCC Title 47 part 15 for fixed outdoor point to multi-point applications.

Mechanical specifications		
Input	10 x 4.3-10 female	
Connector Position	bottom	
Adjustment Mechanism	FlexRET, continuously adjustable	
Wind load (at Rated Wind Speed" 150 km/h) (93 mph)	N   lbf	Frontal: 835   188 Maximal: 840   189
Max. Wind Velocity	km/h mph	242 150
Height / Width / Depth	mm inches	610 / 377 / 169 24.0 / 14.8 / 6.7
Category of Mounting Hardware	H (Heavy)	
Weight	kg lb	12.0 26.0
Packing Size	mm inches	813 / 397 / 212 32.0 / 15.6 / 8.3
Scope of Supply	Panel and 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
85010110	1 Downtilt Kit	Downtilt angle: 0°-10°	8.5   18.7	1

#### Accessories (included in the scope of supply)

85010111	1 clamp	Mast diameter: 55-115   2.2-4.5	4.5   9.9	2
86010153V01	Flex RET			1

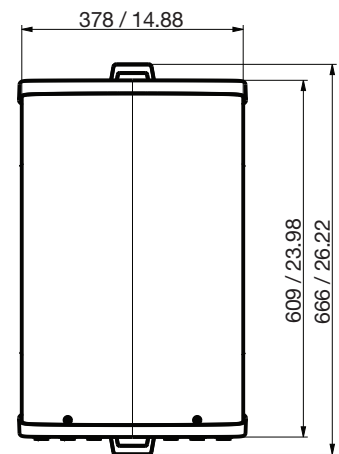
#### Material:

**Reflector screen:** Aluminum.

**Fiberglass housing:** It covers totally the internal antenna components. The special design reduces the sealing areas to a minimum and guarantees the best weather protection. Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting. The color of the radome is light grey. All nuts and bolts: Stainless steel or hot-dip galvanized steel.

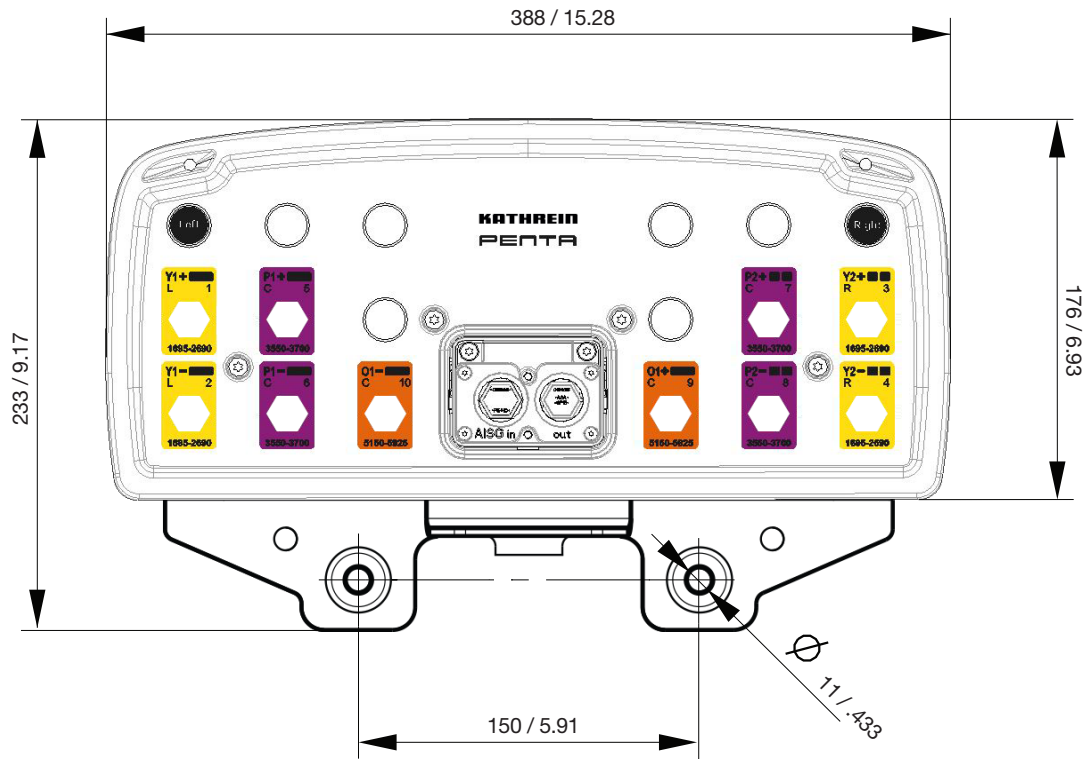
#### Grounding:

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



All dimensions in mm | inches

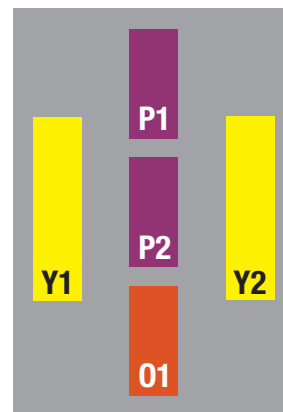
Layout of interface:



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

Correlation Table

Frequency range	Array	Connector
1695–2690 MHz	Y1	1–2
1695–2690 MHz	Y2	3–4
3550–3700 MHz	P1	5–6
3550–3700 MHz	P2	7–8
5150–5925 MHz	O1	9–10



All specifications are subject to change without notice.

The latest specifications are available at [www.kathreinusa.com](http://www.kathreinusa.com)

84010564 2018-R2.2