

65°

1993 mm

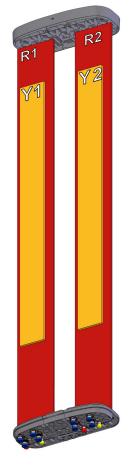
5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm

- Quad band antenna, dual polarisation, 8 connectors
- Independent tilt on each band 2-12° / 2-12° / 2-12° / 2-12°
- MET and RET versions, 3GPP/AISG2.0, in multiple single RET (multiple device type1) or in Multi-RET (device type 17, with firmware above MD3.10).
- Our patented, RET module controlling all tilt angles, fully inserted inside the antenna (field replaceable).
- 5G optimal integration with optional mMIMO & 8T8R Hybrid Kits (compatibility list available on request).

	Frequency Range (MHz)	698-960	698-960	1427-2690	1427-2690
	Array	■ R1	■ R2	<u> </u>	Y2
ERVIEW	Connector	1-2	3-4	5-6	7-8
PRODUCT OVERVIEW	Polarization	XPOL	XPOL	XPOL	XPOL
PRODU	Azimuth Beamwidth (avg)	65°	65°	65°	65°
	Electrical Downtilt	2-12°	2-12°	2-12°	2-12°
	Dimensions		1993 x 472	2 x 205 mm	



ORDERING OPTIONS Select from the different options listed below

SELECT ELECTRICAL DOWNTILT CONTROL & AISG PROTOCOL	SELECT ACTUATOR	SELECT CONNECTOR TYPE	ANTENNA MODEL NUMBER
Manual Electrical Tilt (MET)		4.3-10 Female	5763400R
Remote Electrical Tilt (RET)	Multi-Device Control Unit (MDCU)	4.3-10 Female	5763400RG
AISG v2.0 / 3GPP	Multi-Device Dual Unit (MDDU)	4.3-10 Female	5763400RDx*

 $^{{\}rm *Pre-commissioned\ configuration;\ Contact\ Amphenol\ for\ further\ details.}$







65°

1993 mm

5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm

Frequency Range		MHz	698-960					
		MHz	698-806	790-862	824-894	880-960		
Polarization				±45	0	ı		
Gain	Over all Tilts	dBi	14.5 ± 0.4	15.0 ± 0.4	15.2 ± 0.5	15.4 ± 0.5		
Azimuth Beamwidth		degrees	73.3° ± 3.8°	68.8° ± 3.0°	66.8° ± 3.5°	63.3° ± 3.1°		
Elevation Beamwidth		degrees	11.7° ± 0.9°	10.3° ± 0.8°	9.9° ± 0.7°	9.5° ± 0.6°		
Electrical D	Downtilt	degrees	2°-12°					
Impedance Ohms			50					
VSWR (Ret	turn Loss)	(dB)	< 1.5 (>14)					
	ermodulation for 2 x 20W Carriers	dBc	< -153					
Front-to-Ba	ack Ratio, Total Power, ±30°	dB	> 24.0	> 24.8	> 24.6	> 25.2		
Upper Side	lobe Suppression, Peak to 20°	dB	> 18.7	> 15.5	> 14.6	> 14.3		
Cross Polar Discrimination (XPD) Sector Edges (±60°)		dB	> 8.7	> 8.4	> 8.9	> 9.3		
Maximum	Effective Power Per Port	Watts	250 W					
Inter/Intra Cluster Isolation dB			> 25					

All parameters are compliant with BASTA revision V11.1

R2

ELECTRICAL SPECIFICATIONS Ultra Low Band

Frequency Ra	nge	MHz		698-9	60		
		MHz	698-806	790-862	824-894	880-960	
Polarization			±45°				
Gain	Over all Tilts	dBi	14.2 ± 0.5	14.9 ± 0.4	15.1 ± 0.6	15.5 ±0.4	
Azimuth Beamwidth		degrees	73.4° ± 3.2°	68.2° ± 3.7°	66.7° ± 3.4°	64.0° ± 3.8°	
Elevation Beamwidth		degrees	11.6° ± 0.8°	10.2° ± 0.9°	9.8° ± 0.6°	9.5° ± 0.4°	
lectrical Dov	vntilt	degrees	2°-12°				
mpedance		Ohms	50				
/SWR (Return	n Loss)	(dB)	< 1.5 (>14)				
Passive Intern Brd Order for	nodulation 2 x 20W Carriers	dBc		< -15	3		
ront-to-Back	Ratio, Total Power, ±30°	dB	> 25.1	> 25.3	> 24.3	> 24.6	
Jpper Sidelob	e Suppression, Peak to 20°	dB	> 18.3	> 15.4	> 14.5	> 15.2	
Cross Polar Discrimination (XPD) Sector Edges (±60°)		dB	> 10.1	> 7.3	> 7.2	> 7.7	
Maximum Effective Power Per Port Watts			250 W				
nter/Intra Clu	ıster Isolation	dB	> 25				

All parameters are compliant with BASTA revision V11.1



65°

1993 mm

5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm

Frequency Range		N 41 1-	Hz 1427-2690					
		MHz						
		MHz	1427-1518	1695-1880	1920-2180	2300-2500	2490-2690	
Polarization			±45°					
Gain Ove	er all Tilts	dBi	15.7 ± 0.5	17.1 ± 0.3	17.1 ± 0.4	17.1 ± 0.5	17.4 ± 0.4	
Azimuth Beamwidt	th	degrees	67.2° ± 5.9°	68.3° ± 3.3°	65.8° ± 3.6°	63.5° ± 4.9°	61.9° ± 5.0°	
Elevation Beamwidth		degrees	8.5° ± 0.4°	7.0° ± 0.5°	6.0° ± 0.6°	5.3° ± 0.3°	4.9° ± 0.3°	
Electrical Downtilt d		degrees	2°-12°					
Impedance Ohm		Ohms	50					
VSWR (Return Loss)	s)	(dB)	< 1.5 (>14)					
Passive Intermodul 3rd Order for 2 x 20		dBc	<-153					
Front-to-Back Ratio	o, Total Power, ±30°	dB	> 24.5	> 26.5	> 28.8	> 26.9	> 25.7	
Upper Sidelobe Su	ppression, Peak to 20°	dB	> 15.2	> 16.7	> 15.8	> 15.2	> 13.6	
Cross Polar Discrimination (XPD) Sector Edges (±60°)		dB	> 9.9	> 8.1	> 7.7	> 6.4	> 6.6	
Maximum Effective Power Per Port Watts		Watts	200 W					
Inter/Intra Cluster I	Isolation	dB	> 25					

All parameters are compliant with BASTA revision V11.1 $\,$

ELECTRICAL SPECIFICATIONS MEGA Wide Band

	Y2

Frequency Range		MHz	1427-2690					
		MHz	1427-1518	1695-1880	1920-2180	2300-2500	2490-2690	
Polarization					±45°			
Gain	Over all Tilts	dBi	15.7 ± 0.4	17.1 ± 0.4	17.0 ± 0.3	17.1 ± 0.5	17.4 ± 0.3	
Azimuth Beamwidth		degrees	66.9° ± 5.4°	68.3° ± 3.1°	66.0° ± 3.1°	63.4° ± 3.9°	61.5° ± 5.2°	
Elevation Beamwidth		degrees	8.8° ± 0.4°	7.3° ± 0.4°	6.4° ± 0.6°	5.5° ± 0.4°	5.0° ± 0.3°	
Electrical Downtilt		degrees	2°-12°					
Impedance	Impedance		50					
VSWR (Return	VSWR (Return Loss)		< 1.5 (>14)					
Passive Interm 3rd Order for 2	odulation 2 x 20W Carriers	dBc	< -153					
Front-to-Back	Ratio, Total Power, ±30°	dB	> 24.2	> 27.9	> 29.6	> 28.1	> 26.3	
Upper Sidelob	e Suppression, Peak to 20°	dB	> 15.0	> 18.2	> 17.1	> 16.3	> 15.7	
Cross Polar Discrimination (XPD) Sector Edges (±60°)		dB	> 9.9	> 8.3	> 8.5	> 6.9	> 7.0	
Maximum Effe	Maximum Effective Power Per Port Watt		200 W					
Inter/Intra Clu	Inter/Intra Cluster Isolation		> 25					

All parameters are compliant with BASTA revision V11.1



65°

1993 mm

5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm

ELECTRICAL DOWNTILT CONTROL

For multiband antennas, electrical downtilt for each band can be controlled separately.				
Manual Electrical Tilt (MET) Control	A colored knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob color is identical to the corresponding connector color. The manual tilt 'override' function is always available with no need to remove the physical RET motor.			
Remote Electrical Tilt (RET) Control	The remote control of the electrical tilt is managed by a Multi-Device Control Unit (MDCU) or a Multi-Device Dual Unit (MDDU) inserted in the bottom of the antenna. See details below and refer to the ordering options to see which actuators are available with this particular antenna. A single actuator individually controls the tilt of each band (no need for daisy chain cables between the bands). This module does not add any additional length to the antenna.			

RET ACTUATOR

Amphenol's RET-READY antennas are delivered with the RET Actuator already installed and pre-commissioned with all antenna parameters. Every RET device is factory configured and calibrated so the antenna is ready to be used once delivered to the site which means that there is no need for further installation of RET devices or for programming their configuration or for running a calibration process.

RET-READY ACTUATORS

Multi-Device Control Unit (MDCU). The MDCU is an electronic module that allows the remote control of the electrical downtilt (RET) in Amphenol antennas with factory embedded motors. The MDCU is factory installed. Refer to the ORDERING OPTIONS for availability with this model.

Multi-Device Dual Unit (MDDU). The MDDU allows two separate RET Controllers to independently drive the RETs in antennas with factory embedded motors (for antenna sharing or two technologies). The MDDU is factory installed. Refer to the ORDERING OPTIONS for availability with this model.

Number of RET-READY Actuators		One per antenna			
Input Voltage		+10 to +30 V			
Power Consumption Idle State (AISG P1)		0.5 W			
	High Power Mode (AISG P2)	3 W			
Protocol		3GPP/AISG 2.0			
Tilt Change Duration		Less than 15 seconds, typical (may vary dependent on antenna type and outdoor temperature)			
Precision		±0.5°			
Tilt Change Capability		50,000 minimum			
MDCU		One pair of AISG Male and Female (type IEC60130-9)			
RET Interface	MDDU	Two male AISG 8 pin connectors (type IEC60130-9 Ed 3.0)			
Field Replaceable Unit		Yes			

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.



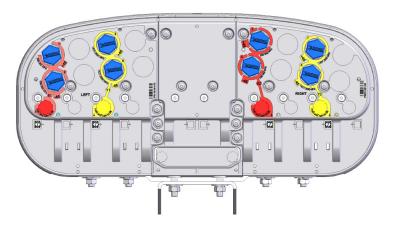
65°

1993 mm

5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm



_	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
LAYOUT	■ R1	698-960	1-2	4.3-10 Female
/LA	R 2	698-960	3-4	4.3-10 Female
ARRAY	<u> </u>	1427-2690	5-6	4.3-10 Female
∢	Y2	1427-2690	7-8	4.3-10 Female

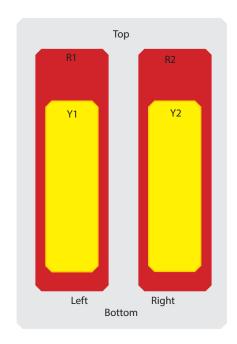


Diagram shown at right depicts the view from the front of the antenna.

The illustration is not shown to scale.

MECHANICAL SPECIFICATIONS

Length	1		mm (in)	1993 (78.4)
Width			mm (in)	472 (18.6)
Depth		mm (in)	205 (8.0)	
Net We	eight - Antenna Only		kg (lbs)	40 (88.2)
Mecha	Mechanical Distance Between Mounting Points		mm (in)	Refer to Diagram
	Windload Calculation		km/h (mph)	150 (93.2)
	91-1-4:2005 using Tunnel Coefficients)	Frontal	N (lbf)	735 (165.2)
	,	Lateral	N (lbf)	466 (104.7)
	Rearside		N (lbf)	740 (166.3)
Operat	Operational Wind Speed		km/h (mph)	160 (99.4)
Surviva	al Wind Speed		km/h (mph)	240 (149)
Radon	ne Color			Gray RAL7035
Radom	ne Material			Outdoor Fiberglass
Lightning Protection			Direct Ground	
бı	Shipping Dimensions (Length x Width x Depth)		mm (in)	2235 x 540 x 370 (87.9 x 21.2 x 14.5)
Shipping	Shipping Weight		kg (lbs)	51 (112.4)
S	Shipping Volume		m³ (ft³)	0.447 (15.7)

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.



65°

1993 mm

5763400R

5763400RG 5763400RDx

Quad Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1993 mm

ENVIRONMENTAL SPECIFICATIONS

Environmental Standard		ETS 300 019
Operating Temperature	° C (° F)	-40° to +60° (-40° to 140°)
Product Environmental Compliance		Product is RoHs Compliant

$\label{lem:accessories} \mbox{ACCESSORIES} \ \mbox{ All accessories are ordered separately unless otherwise indicated}$

ITEM	MODEL NUMBER	WEIGHT
Brackets for pole Ø48 to Ø115 mm (Ø1.9 to Ø4.5 in) delivered as standard	O8464	3.4 kg (7.5 lbs)
Brackets for pole Ø70 to Ø150 mm (Ø2.8-Ø5.9 in) optional	O8465	3.9 kg (8.6 lbs)
Kit to add mechanical tilt (0° to 10°) to above brackets optional	0900396/00	2.3 kg (5.1 lbs)

INSTALLATION Please read all installation notes before installing this product.



Always attach the antenna by all mounting points.

Do not install the antenna with the connectors facing upwards.

MAIN DIMENSIONS

Length	Н	mm (in)	1993 (78.4)
Width	W	mm (in)	472 (18.6)
Depth	D	mm (in)	205 (8.0)
Distance between mounting points	Е	mm (in)	1766 (69.5)

