Quintel®
New Dimensions in Wireless™

MultiServ™ Quadband 8 Port Antenna

2x700MHz,2x850MHz,2x1900MHz,2x1710-1755/2110-2170MHz

The Quintel MultiServ™ Quadband 8 Port Antenna with patented QTilt™ technology uniquely delivers four independent services in a single slim-line antenna. This enables existing antenna-constrained network sites to be upgraded to add new services such as LTE in both 700 & AWS bands with the replacement of one antenna.

The Quintel MulitServ™ Quadband 8 Port Antenna is an ideal solution for independently optimizing multiple services when rapidly introducing new services. Technology agnostic, each band provides flexibility for existing and future technologies such as GSM, CDMA, UMTS, LTE and advanced MIMO implementations.

Quick Facts:

Product #:	QS6658-2
Polarization:	XX
Services:	4
Height:	72”
Beam Width:	65°

The tilt of each band is controlled independently via internal RET actuators compliant to AISG1.1, AISG2.0 and 3GPP protocols. Providing a total of 4 independent tilts 1x(698-787MHz) + 1x(824-894MHz) + 1x(1850-1990MHz) + 1x(1710/1755,2110/2170MHz).

Features

- Operates over the 700, 850, 1900 & AWS bands, all in one antenna.
- Has variable electrical tilt per frequency band.
- Enables independent technology performance optimisation per band.
- AISG & 3GPP compliant internal remote electrical tilt (RET).
- Dual RET inputs configurable for AISG 1.1/2.0 and 3GPP software via upload.
- Provides 8 antenna Ports in a slim-line (12” wide) form factor.
- Allows a simple antenna swap out and upgrade to high order MIMO.

Electrical Characteristics	700MHz	850MHz
Operating Frequency	698MHz to 787MHz	824MHz to 894MHz
Azimuth 3dB beamwidth[1]	65.5°	64°
Elevation beamwidth[1]	12°	10.5°
Gain[1]	13.0dBi	14.0dBi
Polarization	±45°	±45°
Electrical down-tilt range	2°-10°	2°-10°
Upper sidelobes (Within 20° above mainbeam)[1]	-18dB	-18dB
Front to Back Ratio (Co Polar within 20 °cone)	≥22dB	≥25dB
Interband isolation[1]	≥25dB	≥25dB
Intra band isolation	≥30dB	≥30dB
Return loss (VSWR)	14dB (1.5:1)	14dB (1.5:1)
Squint[1]	>±3deg	>±3deg
Tracking[1]	>±3dB	>±2dB
Cross Pole discrimination (at 0 °)	>15dB	>15dB
Power handling (per port)	500 watts	500 watts
Passive intermodulation	150dBc (2x 43dBm)	150dBc (2x 43dBm)

Electrical Characteristics	1900MHz	AWS
Operating Frequency	1850MHz to 1990MHz	1710-1755/2110-2170MHz
Azimuth 3dB beamwidth[1]	56°	59/70 °
Elevation beamwidth[1]	5.8°	6.3°
Gain[1]	16.5dBi	16/16.4dBi
Polarization	±45°	±45°
Electrical down-tilt range	2°-7°	2°-7°
Upper sidelobes (Within 20° above mainbeam)[1]	-18dB	-18dB
Front to Back Ratio (Co Polar within 20 °cone)	≥25dB	≥25dB
Inter band isolation[1]	≥28dB	≥28dB
Intra band isolation	≥28dB	≥28dB
Return loss (VSWR)	14dB (1.5:1)	14dB (1.5:1)
Power handling (per port)	300 watts	300 watts
Squint[1]	>±3deg	>±3deg
Tracking[1]	>±3dB	>±2dB
Cross Pole discrimination (at 0 °)	>18dB	>14dB
Passive intermodulation	150dBc (2x 43dBm)	150dBc (2x 43dBm)

[1] Typical Performance across frequency and downtilt.

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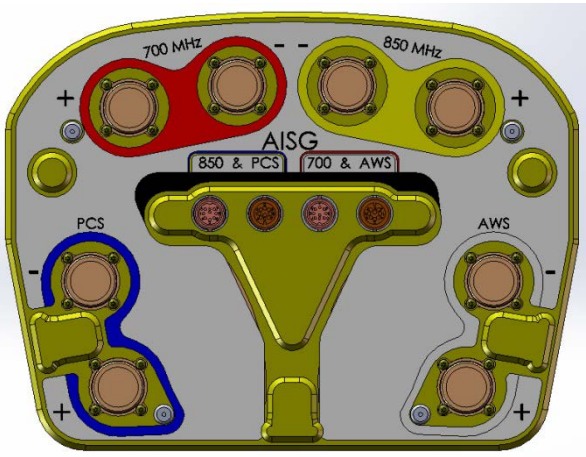
Fully Integrated RET Characteristics	
AISG Standards	V1.1,V 2.0 and 3GPP
AISG Data rate	9.6 kbps
No of RETs	4 internal
Connector type	IEC 60130-9 (Ed 3.0)
MTBF	36,000 Operational moves
Type approvals	FCC Part 15, EN 60950-1 (v2001), EN61000-4-5 (Lightning protection)



Mechanical Characteristics	
Width	12 inches (304.8mm)
Depth	9 inches (228.6mm)
Height	72 inches (1828mm)
Weight excl mounting brackets	79lbs (36 kg)
No. of connectors	8 (2 per operating band)
Connector type	7/16 DIN female Long neck
Max Operational wind speed	150mph (67m/s)
Wind load @ Operational wind	
Frontal	1340N (300lbs)
Side	820N (185lbs)
Operating temperature	-40°C to +65°C

All specifications are subject to change without notice. Please contact your Quintel representative for complete details

About Quintel

Quintel is a leading innovator in the design, development, and delivery of network-efficient antenna solutions for wireless operators worldwide. The company's products enable global wireless operators to independently deploy and optimize multiple air interfaces or services on a single standard antenna platform. Quintel is the only antenna maker whose products can increase a wireless network's capacity and provide additional services, without increasing the number or size of antennas. Our core technologies originated in the United Kingdom's Ministry of Defence, and is now deployed throughout the world. Quintel is headquartered in Rochester, New York with engineering and sales offices in Mountain View, California, and Milton Keynes, UK with additional offices throughout North America, Europe and Asia.
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Member