

QD4616-7

MultiServ.

4ft 65° MultiServ™ 16-Port Antenna

2x698-728MHz / 4x758-798MHz / 2x824-894MHz / 8x1695-2400MHz

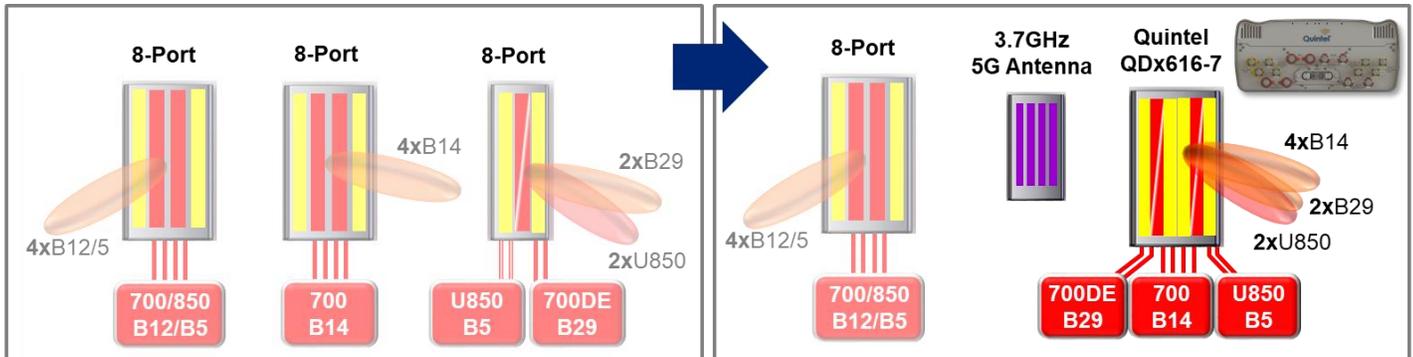
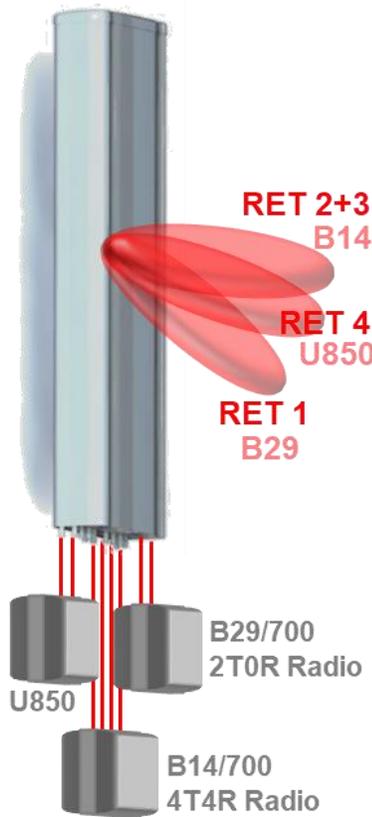


- Allows B29 and B5 services to share same antenna with B14
- Frees up an Antenna position at sites for 3.7GHz Antenna
- B29/B14 Cross-Band Internal PIM > 159dBc

- Full length Low & High-band Arrays for optimal VBW and Gain
- Best in class Quality, Internal and External PIM performance

	Ports 1 2	Ports 3 4 5 6	Ports 7 8	Ports 9 - 16			
Polarization	±45°	2x ±45°	±45°	4x ±45°			
Operating Frequency (MHz)	698-728	758-798	824-894	1695-2400			
	698-728	758-798	824-894	1695-1880	1850-1990	2110-2180	2300-2400
Gain (dBi)	12.3	12.8	13.3	16.2	16.7	17.1	17.8
Azimuth beamwidth ¹	72±4.5°	66±5.1°	60±6.9°	67±5.4°	62±4.7°	63±6.0°	54±4.0°
Electrical down-tilt range	2°-16°	2x 2°-16°	2°-16°	2x 0°-9°			
Elevation beamwidth ¹	19.7±1.2°	17.6±1.0°	15.7±1.1°	7.3±0.4°	6.7±0.5°	6.0±0.3°	5.6±0.2°
	12.0±0.6	12.4±0.5	12.9±0.8	15.7±0.7	16.4±0.4	16.7±0.5	17.5±0.4
BASTA Gain (dBi)	12.0	12.7	13.1	15.5	16.3	16.4	17.3
	12.1	12.5	12.9	15.8	16.5	16.9	17.6
	11.4	12.0	12.3	15.8	16.3	16.8	17.4
	14.5	13.5	11.0	14.7	14.1	13.1	13.0
USLS 20°>mainbeam (dB)	14.5	13.5	11.0	14.7	14.1	13.1	13.0
FTB at 180°±30° (dB) ¹	40.3	36.9	31.5	38.9	37.5	27.2	21.4
Isolation Port to Port (dB)	31	39	37	34	33	36	39
Return loss/VSWR (dB)	14/1.5	14/1.5	14/1.5	14/1.5	14/1.5	14/1.5	14/1.5
X Polar at 0° (dB) ¹	15.0	15.8	15.8	15.2	16.4	18.1	18.8
Max Power handling (port)	75 Watts	100 Watts	200 Watts	250 Watts			
Max Power (all ports)	900 Watts						
PIM (dBc: 2x43dBm)	>153 (>159 X-Band B29/B14)			>153			

¹ BASTA



Application Example: Allows 3.7GHz deployment maintaining 3x Antenna Positions with all services



Mechanical Characteristics

Dimensions	L 51.5"(1308mm) x W 22"(558mm) x D 9.6"(245mm)
Weight (excl mounting brackets)	91lbs (41.4kg)
No. of Connectors	16x 4.3-10.0 DIN Female Long Neck
Max Wind Speed	150mph (67m/s)
Equivalent Projected Area ²	Front: 6.5ft ² (0.61m ²) Side: 2.0ft ² (0.19m ²)
Wind Load ² @ 161km/h (45m/s)	Front: 167lbs (742N), Side: 52lbs (230N)
Operating Temperature	-40°C to +65°C

² Equivalent Projected Area and Wind Load derived from simulation measurements.
Equivalent Projected Area assumed $C_d=1$

Fully Integrated RET Characteristics

Protocol	V 1.1/2.0/3GPP (SRET Type 1)
Surge immunity	IEC 61000-4-5:2005 4KV(AISG PIN)
AISG Data rate	9.6 kbps
RET Connectors	1x 8-Pin DIN Female & 1x 8-Pin DIN Male