

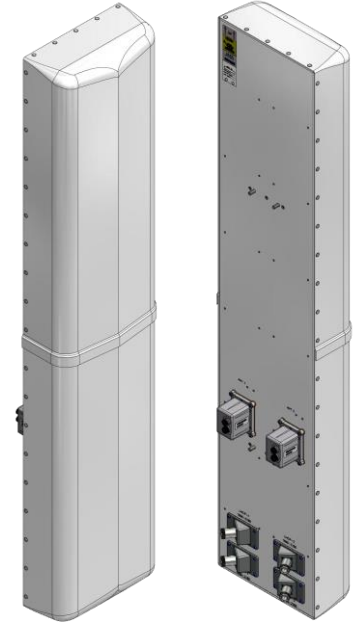
# QCAP-FRO-656-V

Antenna Systems Group

Circular polarization (2) 1695-2180 MHz antennas, fast roll-off, 72" length,

56° horizontal pattern, variable E-tilt

- Fast roll-off (FRO) improves intra- and inter-cell SINR
- Separate housing and reflector construction optimizes RF performance while maximizing mechanical strength
- Good passive intermodulation (PIM) performance reduces harmful interference
- Independent tilt per array
- Suitable for LTE/CDMA/UMTS/GSM
- AISG 2.0 RET Control



## ELECTRICAL SPECIFICATIONS

Frequency band, MHz	1695-1850	1850-1990	1990-2180
Horizontal beamwidth, 3 dB points	57°	53°	51°
Gain, dBi	15.0	15.0	15.0
Gain, dBic	18.0	18.0	18.0
Vertical beamwidth, 3 dB points	6.0°	5.5°	5.8°
Front-to-back at 180°, dB	>30		
Upper sidelobe suppression, dB (typical)	< -18		
Polarization	2x circular LHCP and RHCP		
Electrical downtilt range (see Order Information)	0° - 11° or 4° - 15°		
VSWR / return loss (dB), (maximum)	1.5:1/14.0		
Axial ratio, dB (typical)	< 2		
Isolation between ports, dB (minimum) 2110 - 2155	< -25		
Intermodulation (2 x 20 w), IM3, dBc, maximum	< -153		
Impedance (ohms)	50		
Maximum power per connector, CW (w)	250		

**MECHANICAL SPECIFICATIONS**

Dimensions, length/width/depth	72.0/14.6/7.3 in. (1829/372/186 mm)
Connector (quantity) type	(4) 7-16 DIN female
Connector torque	220-265 lbf·in (23-30 N·m)
Connector location	Back
Antenna weight	43 lb (19.6 kg)
Bracket weight (not included in antenna weight)	13.2 lb (6.0 kg)
Standard bracket kit	919011 (included)
Mechanical downtilt range	0-12°
Radome material	High strength Luran®, UV stabilized, ASTM D1925
Wind survival	150 mph (241 km/h)
Front wind load	211.8 lbf (939 N)
Equivalent flat Plate	4.23 sq ft (c=2)

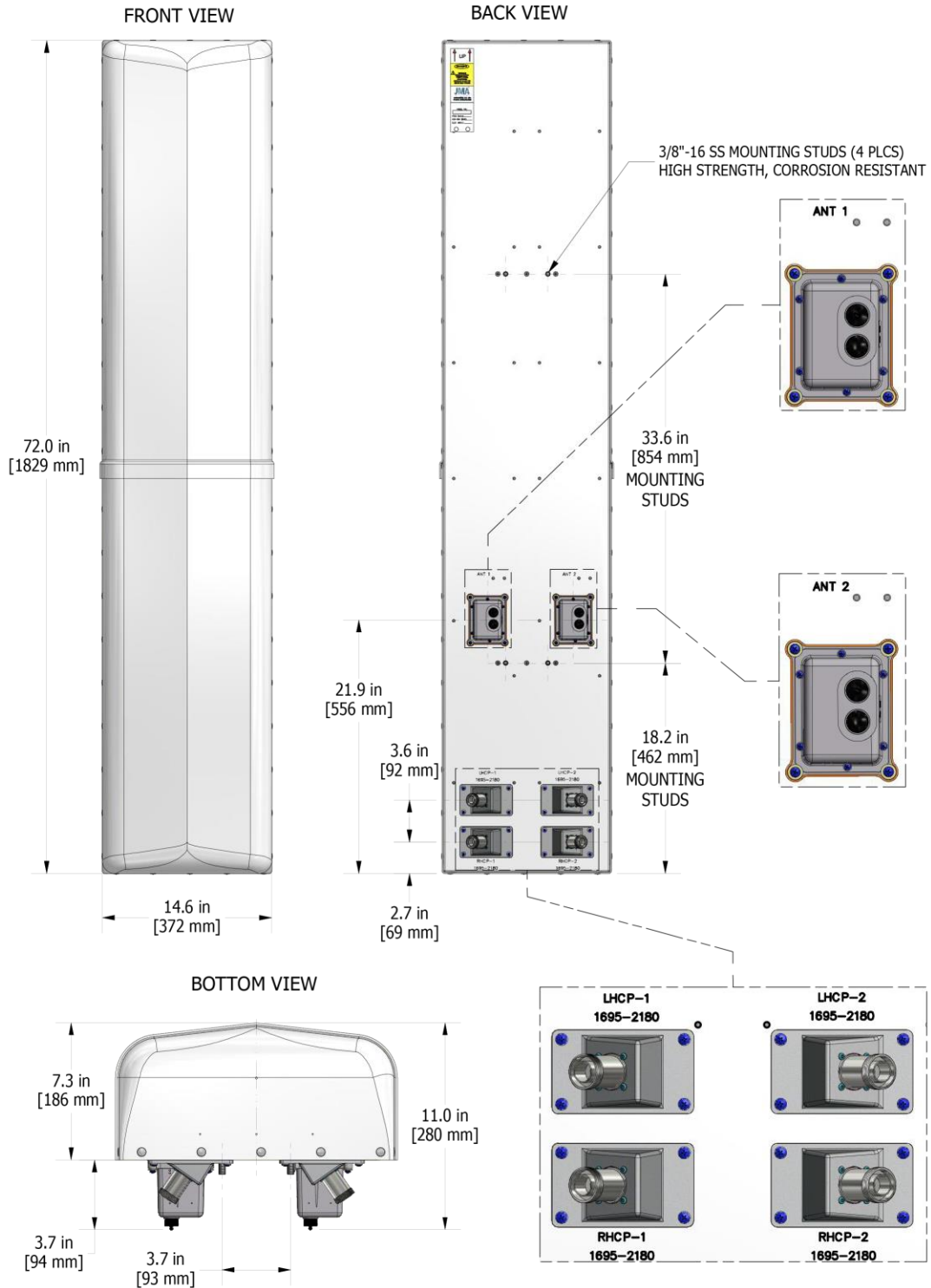
**RET INFORMATION (RET motors included in VR0 and VR4 models)**

Model	RET-200
Mounting location	Back
Communication standard	AISG 2.0
Control system	PCU-1000

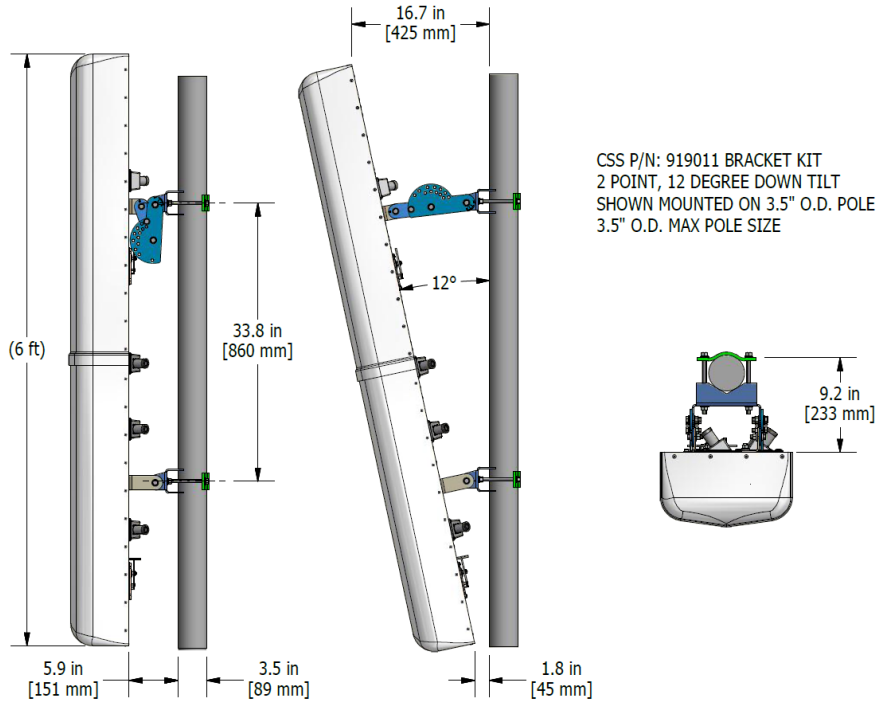
**ORDER INFORMATION**

MODEL	DESCRIPTION
QCAP-FRO-656-VR	6F CP HB/HB FRO 56° 0-11° EDT
992100-CA013-SC	AISG jumper cable, M/F, 1.3 meters
919036	Optional 0-12° antenna mounting and downtilting kit for 4.5" OD pole

## Mechanical outline drawing: QCAP-FRO-656-VR



## Standard bracket kit



## Optional bracket kit

