

True Octo and True Twelve Port Capacity Antenna Family: New Product

(North America Communication)

CommScope is happy to announce that it has released two new performance antennas families.

The NNHH-65-V1 and NNH4-65-V1 families provide **4 wideband low band ports** for **true 4T4R capacity with only one antenna**. That also means that when a diplexed dual band radio with 4 low band ports is used, then one dual band radio and one of these antennas provide enough ports for **4T4R applications for 700MHz and 800MHz**. That **reduces the antenna count** which is especially crucial on towers with restrictions of space, weight and also if the number of antennas per sector is limited.



The **narrow package** (19.6 inches width) is significantly **smaller than two hex** or octo port antennas side-by-side and therefore the **visual impact, weight and size is improved** by only using one true octo or true twelve port antenna.

For both families, CommScope offers all three standard macro cell **antenna lengths of 4ft, 6ft, 8ft**.

The difference between the NNHH and NNH4 families are the number of high band ports. The **NNHH family has 4 high band ports** which works great when AWS and PCS signals are diplexed either in the radio or externally. The **NNH4 family has 8 high band ports** which works perfectly with 8 port (non-diplexed) dual band high band radios. In that case, all 8 high band ports on the antenna can be directly connected to the 8 ports on the radio.

The NNH4 antenna family is essentially **two hex port antennas under one radome**, which is smaller (19.6 inches) than the two individual hex port antennas side-by-side (which would be 2 x 12 inches = 24 inches).

The -V1 versions of the NNHH and NNH4 families are high performing products, which meet **-153dBc PIM** for **superior noise suppression** and **high data throughput rates**.

Both antenna families have **independent tilt for each column**. The NNHH family has 4 internal RETs, the NNH4 family has 6 internal RETs which are all set to cascaded **SRET (Single RET)** mode. These antennas have one AISG input (RS485) port which is the interface to all internally daisy-chained RET motors (low and high band daisy-chained together).

Product Highlights:

- **Quad Band 4T4R with One Antenna:** Superior LTE performance for 4T4R applications across all four bands (700MHz / 850MHz / AWS / PCS) with only one antenna
- **Narrow Package:** Ideal solution for sites with size, weight, antenna count or visual appearance restrictions.
- **Industry Leading Performance:** Impressive sector power ratio (SPR) to reduce cell overlap, minimize the noise in the network and ensure high data throughput rates.
- **Multiband:** Supports 698-896 MHz and 1695-2360 MHz which include 700MHz, 850MHz, AWS, PCS and WCS including AWS-3 and AWS-4.
- **Independent tilt for each radiating column:** One RET per column allows flexibility to use optimum tilt for best interference suppression.
- **-153dBc PIM:** Superior, long term PIM performance, which is crucial for noise suppression in the RF path and for high data throughput rates.

Ordering Information:

Please see details below for the NNHH and NNH4 -V1 families.

Model Number	Beamwidth	Length	Width	PIM Spec	Ports & Frequency	RET Information
True Octo Port Antennas						
NNHH-65C-R4-V1	65°	8 ft	19.6 in	-153dBc	4x 698–896 MHz 4x 1695–2360 MHz	<ul style="list-style-type: none"> • 4 internal RETs • SRET mode • 1 set of AISG IN/OUT ports
NNHH-65B-R4-V1	65°	6 ft	19.6 in			
NNHH-65A-R4-V1	65°	4 ft	19.6 in			
True 12 Port Antennas						
NNH4-65C-R4-V1	65°	8 ft	19.6 in	-153dBc	4x 698–896 MHz 8x 1695–2360 MHz	<ul style="list-style-type: none"> • 6 internal RETs • SRET mode • 1 set of AISG IN/OUT ports
NNH4-65B-R4-V1	65°	6 ft	19.6 in			
NNH4-65A-R4-V1	65°	4 ft	19.6 in			

Please contact your local CommScope Sales Representative for more information.