



## APC Cable Ladder Capacity

SKU	Description	Capacity (Lbs)
AR8164ABLK/AR8164AKIT	6" Ladder	690
AR8165ABLK/AR8165AKIT	12" Ladder	1380

These ratings apply only to the cable ladders.

Capacity for a structure containing cable ladder must take into account all components of the structure: wall anchors, rack roof and castors, rod suspended from ceiling, etc.

To help you understand this, please refer to the following examples:

- Cable ladder is sold in 10 foot sections.
- This will cover the width of four 600 mm (2.5 foot) wide cabinets.
- Each NetShelter cabinet has a roof rated for 200 lbs total (from all sources).
- AR8186 Ladder Elevation Brackets are used as an attachment bracket on each roof , two per roof.

In this example the maximum weight on the ladder would be approx. 800 lbs, with no more than approx. 200 lbs on any one roof.

Using the above example, if the ladder is suspended using three brackets instead of four the maximum weight on the ladder would be 600 lbs, with no more that 200 lbs on any one roof.

NOTE: We recommend that a 10 foot section of cable ladder is suspended by at least three points, one near each end and one near the middle.

Since the load rating of the NetShelter roof is lower than the rating of the cable ladder the obvious question is:

### How many cables can I put in the ladder rack if it's suspended by the NetShelter roof?

The answer is going to depend on how many roofs are suspending the weight, but it's probably more than you would think.

Remember, each roof can support 200 lbs maximum (from all sources) so the capacity rises as the ladder rack is suspended by more roofs.

Let's do some quick 'rough' calculations to show approximate capacity.

Here's an example explaining approx. how many cables can be put in the ladder rack which spans two 600 mm wide (2.5 foot) cabinets and is supported equally by both roofs.

- Since the ladder rack is supported by two roofs the maximum load is 400 lbs.
- A very common cable type to populate cable ladder is Cat 5A.
- An approximate weight for Cat 5A cable is 35 lbs. per 1,000 feet.
- We're going to cut the above 1,000 foot cable into 5 foot long sections to span the two cabinets.
- At 35 lbs/1000 foot box, approx 22.8 boxes = 400 lbs.
- Each 1,000 foot box contains 200 cables of 5 foot.
- So, 400 lbs of Cat 6A cables, cut into 5 foot pieces, placed across a 5 foot long section of cable ladder, suspended equally by two roofs yields \*approx. 4,500 cables.

**\*The above example is used to show that a great deal of cables can be supported by the NetShelter roof. This does not take into account the weight of the ladder rack, supporting brackets, or any other items on the roof such as troughs, partitions or power cords...etc. When determining cable capacity for your specific application you must take into account all weight loads on the roof.**