| Quantity of bikes | Max bike (lbs = pounds) on the rack (total of all tray positions) | Short text explanation. | Long text explanation. |
|-------------------|---|--|--|
| 1 Bike | 120 | Tray-1 (Closest to car) can hold a 120 (lbs) bike. | The frame of the rack can hold more than 120 (lbs) but the max for the tray is 120 (lbs). Thus the max for a 1 bike setup is 120 (lbs) |
| 2 Bikes | 240 | Tray-1 can hold a 120 (lbs) bike & Tray-2 can hold a 120 (lbs) bike. | The frame of the rack can hold more than 240 (lbs) but the max for each tray is 120 (lbs). Thus the max for a 2 bike setup is 120 (lbs) per tray or 240 (lbs) total of bikes. |
| 3 Bikes | 300 | Tray-1 can hold a 120 (lbs) bike, Tray-2 can hold a 100 (lbs) bike, & Tray-3 can hold 80 (lbs) bike. | The frame of the rack can hold 300 (lbs) but the max for each tray is reduced as the bike gets further from the car. Thus the max for a 3 bike setup is 120 (lbs) for Tray-1, 100 (lbs) for Tray-2, & 80 (lbs) for Tray-3 for a total of 300 (lbs). |
| 4 Bikes | 185 | Tray-1 can hold a 70 (lbs) bike, Tray-2 can hold a 40 (lbs) bike, Tray-3 can hold a 40 (lbs) bike, & Tray-4 can hold a 35 (lbs) bike. | The frame of the rack can hold 185 (lbs) for a 4 Bike set up. The max for each tray is reduced as the bike gets further from the car. Thus the max for a 4 bike setup is 70 (lbs) for Tray-1, 40 (lbs) for Tray-2, 40 (lbs) for Tray-3, & 40 (lbs) for Tray-4. Total of 185 (lbs). |
| General note 1 | | Even though the rack will hold more each tray and its components have a (lbs) limit that cannot be exceeded. If you do you could fail tray arms or pivots for example. | |
| General note 2 | | As you get further away from the car (adding more bikes or more tray positions) you increase the lever arm on the rack frame. Think diving board. As you get further out on the diving board you bend the board more by increasing the force more on the end of the boad and you increase the force on the diving boards attachments to the ground even though you weigh the same. As you add trays or more bikes to the rack with add-ons you increase the force on the rack frame, especially the attachment point to the car and lock bar. So each tray can hold 120 pounds if in a 1 or 2 bike setup however with a 3 & 4 bike set up we are now stressing the frame and need to lower the amount of weight on the "end" of the rack furthest from the car to reduce the forces where the rack attaches to the car and where add-ons attach to each other. | |