

## Modulation and Coding Schemes index (MCS index)

Various modulation schemes and coding rates are defined by the standard and are represented by a Modulation and Coding Scheme (MCS) index value. The table below shows the relationships between the variables that allow for the maximum data rate.

MCS Index	Modulation	Spatial Streams	Coding Rate	802.11n Data rate			
				20 MHz		40 MHz	
				Long GI	Short GI	Long GI	Short GI
0	1	BPSK	1/2	6.5	7.2	13.5	15.0
1	1	QPSK	1/2	13.0	14.4	27.0	30.0
2	1	QPSK	3/4	19.5	21.7	40.5	45.0
3	1	16-QAM	1/2	26.0	28.9	54.0	60.0
4	1	16-QAM	3/4	39.0	43.3	81.0	90.0
5	1	64-QAM	2/3	52.0	57.8	108.0	120.0
6	1	64-QAM	3/4	58.0	65.0	121.5	135.0
7	1	64-QAM	5/6	65.0	72.2	135.0	150.0
8	2	BPSK	1/2	13.0	14.4	27.0	30.0
9	2	QPSK	1/2	26.0	28.9	54.0	60.0
10	2	QPSK	3/4	39.0	43.3	81.0	90.0
11	2	16-QAM	1/2	52.0	57.8	108.0	120.0
12	2	16-QAM	3/4	78.0	86.7	162.0	180.0
13	2	64-QAM	2/3	104.0	115.6	216.0	240.0
14	2	64-QAM	3/4	117.0	130.0	243.0	270.0
15	2	64-QAM	5/6	130.0	144.4	270.0	300.0
...	3	...	...	...	...	...	...
23	3	64-QAM	5/6	195.0	216.0	405.0	450.0
...	4	...	...	...	...	...	...
31	4	64-QAM	5/6	260.0	288.9	540.0	600.0