

MODULATING SIGNAL DESCRIPTION EXHIBIT

Digital modulation rate:

Channel symbol modulation rates:

15.625 KHz (3.5 MHz bandwidth)

31.250 KHz (7 MHz bandwidth)

Effective data rate (accounting for all modes, coding, modulation types:

2.08 Mbps (R1/2 coded, BPSK, 3.5 MHz bandwidth) to

26.18 Mbps (R3/4 coded, 64QAM, 7 MHz bandwidth)

Modulation Signal Description:

256-carrier OFDM, BPSK, QPSK, 16-QAM, 64-QAM

Channel Bandwidth: 3.5 MHz						
Modulation	QPSK	QPSK	16QAM	16QAM	64QAM	64QAM
Code Rate:	1/2	3/4	1/2	3/4	1/2	3/4
Composite Data Rate Mbps	2.08	4.37	5.82	8.73	11.88	13.09

Channel Bandwidth: 7.0 MHz						
Modulation	QPSK	QPSK	16QAM	16QAM	64QAM	64QAM
Code Rate:	1/2	3/4	1/2	3/4	1/2	3/4
Composite Data Rate Mbps	4.15	8.73	11.64	17.45	23.75	26.18

Packet data transmission system with frame durations ranging from 5 to 20 milliseconds, transmissions within the frame duration typically 1 millisecond or less, depending on the simulated network traffic density.