

JUL-6226

Modulation System



Japan Radio Co., Ltd.

1. Modulation system description

The modulation method is $\pi/4$ shift QPSK, 16QAM, and it encodes in ASIC, the base band is band-limited (low-pass filter), and the modulation operation is done with the modulator. It is rolling off rate 0.5.

General

Transmit/Receive Band	EL0	24.101-24.549 GHz
	EL1	24.549-24.997 GHz
	EL2	24.997-25.445 GHz
	EH1	25.557-26.005 GHz
	EH2	26.005-26.453 GHz
Channel spacing		28MHz
Number of Remote Terminals		239 per Carrier
Duplex / Access Method		TDD-TDM/TDMA
Modulation		QPSK & 16-QAM, dynamic adaptive
Throughput/RF Carrier	QPSK	23Mbps Aggregate
	16QAM	46Mbps Aggregate
Protocols Supported		802.3,802.1Q
Transmit output power	QPSK	AP:+14dBm,WT:-6dBm to +14dBm (ATPC)
	16QAM	AP:+11.5dBm,WT:-8.5dBm to +11.5dBm(ATPC)
Frequency tolerance		± 15 ppm
Minimum receiving level (BER= 10^{-6})	QPSK	-79dBm or less
	16QAM	-69dBm or less
RF spectrum mask	QPSK	26MHz or less
	16QAM	26MHz or less
Transmitter spurious emissions		-30dBm/MHz or less