

487 RF specifications

Downstream Receiver characteristic

Parameter	Specification			
RF frequency range	757 to 758 MHz			
RF Channel Bandwidth	245, 330 KHz			
Modulation Format	QPSK, 16QAM & 64QAM			
Forward Error Correction	64QAM: ITU-T J.83 Annex B 16QAM & QPSK: ITU-T J.83 Annex A			
Symbol Rate	330 KHz 64QAM	278.13 Ksps		
	330 KHz 16QAM & QPSK	291.73 Ksps		
Data Rate (Raw)	330 KHz 64QAM	1668 Ksps		
	330 KHz 16QAM	1166 Ksps		
	330 KHz QPSK	583 Ksps		
RF SNR for BER<10E-6	64 QAM	24 dB		
	16 QAM	19 dB		
	QPSK	13 dB		
RF minimum Signal Level	BW [KHz]	Minimum DS RX level [dBm]		
		64QAM	16QAM	QPSK
	330	-87	-91	-94
RF maximum signal level	-49 dBm			
Frequency Tolerance	± 50 kHz			
Adjacent channel for BER<10E-6	10 dB			

Upstream Transmitter characteristic

Parameter	Specification
RF frequency range	787 to 787 MHz
RF Channel Bandwidth	250, 330 KHz
Modulation Format	QPSK & 16QAM
Forward Error Correction	Reed Solomon Encoder
Symbol Rate	200, 260 Ksps
Data Rate (Raw)	400 Kbps @ QPSK, 250 KHz 800 Kbps @ 16QAM, 250 KHz 520 Kbps @ QPSK, 330 KHz 1040 Kbps @ 16QAM, 330 KHz
RF amplifier output P1dB	36 dBm
RF TX Level	-17 to +27 dBm
Spurious Emissions	Meets FCC title 47 part 27

General

RF In/Out connector	N type
RF In/Out Impedance	50 ohm
RF In/Out Return Loss	8 dB Min.
Power supply	9.5 V to 29V, 3A (max),
Power amplifier DC (final stage)	8.2 V, 650 mA max
Operating temperature	-30 to 60 °C



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