

## 487i ODU RF specifications

### Downstream characteristic (Receiver)

	<b>Parameter</b>	<b>Specification</b>			
	RF frequency range	757 to 758 MHz			
	RF Channel Bandwidth	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	<b>BW [KHz]</b>	<b>Minimum DS RX level [dBm]</b>		
			<b>64QAM</b>	<b>16QAM</b>	<b>QPSK</b>
		330	-88	-91	-94
	RF maximum signal level	-49 dBm			
	Frequency Tolerance	± 50 kHz			
	Adjacent channel for BER<10E-6	10 dB			

### Upstream characteristic (Transmitter)

	<b>Parameter</b>	<b>Specification</b>
	RF frequency range	787 to 787 MHz
	RF Channel Bandwidth	325 KHz
	Modulation Format	QPSK & 16QAM
	Forward Error Correction	Reed Solomon Encoder
	Symbol Rate	260 Ksps
	Data Rate (Raw)	520 Kbps @ QPSK 1040 Kbps @ 16QAM
	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	10.5 V, 850 mA max
	Operating temperature	-30 to 60 °C