

ON-CANNEL REPEATER (OCR)

OCR Electrical Specifications	OCR UHF	OCR 700	OCR 800	OCR 900
Frequency of Operation (MHz)	380-430 450-470 470-512	764-776 794-806	806-824 851-869	896-901 935-940
Sensitivity (12dB SINAD)	-115 dBm	-113 dBm		
Input Carrier Detection Threshold	-115 to -80 dBm	-113 to -80 dBm		
Carrier Detection Threshold Adjustment Step	1 dB			
Carrier Detection Attack Time	< 2 ms			
Maximum Input Signal	+20 dBm			
Maximum Gain Range	70 to 140 dB			
Output Power (Programmable)	1 W to 30 W			
Output Power Tolerance	1 dB			
Duty Cycle	100 %			
Output Frequency Stability	Tracks Input Signal Frequency			
Passband Frequency Stability: UHF 700/800 MHz 900 MHz	+/- 1.5 ppm (+/- 0.1ppm optional*) +/- 1.0 ppm (+/- 0.1ppm optional*) +/- 0.1ppm * requires external reference generator option			
Modulation Types	Narrowband FM Voice and Data			
Adjacent Channel Spacing (Programmable)	25 kHz W	25 kHz N	12.5 kHz W	12.5 kHz N
Group Delay	80 us	110 us	130 us	145 us
Selectivity	60 dB	65 dB	55 dB	60 dB
Receiver Spurious Response Rejection	> 70 dB			
Receiver Intermodulation	> 70 dB			
Receiver Conducted Spurious Emissions	< -57 dBm			
Transmitter Conducted Spurious Emissions	< -20 dBm			
Transmitter FM Hum and Noise	> 45 dB			
Input Impedance	50 Ohms			
Output Impedance	50 Ohms			
Input VSWR	< 1.5:1			
Output VSWR	< 1.5:1			
Power Supply Voltage	22 to 28 VDC			
Power Supply Current Drain Standby Transmit	<0.5 A < 4 A			

OCR Special Features

Test Tone Generator	✓
Marker Tone Generator	✓
PL / DPL Gating	✓
MOSCAD Remote Monitoring and Control	✓
<u>Alarms</u>	
Power Alarm	✓
VSWR Alarm	✓
Temperature Alarm	✓
Synthesizer Out of Lock Alarm	✓
Built-In Redundant Power Amplifier	✓ (UHF OCR Only)
<u>Programmable Settings</u>	
Frequency of Operation	✓
Output Power	✓
Carrier Detection Threshold	✓
Carrier Detection Timeout	✓
DCS/CTCSS	✓
Selectivity / Group Delay	✓

OCR Mechanical Specifications

RF Connectors	SMA Female
Dimensions	260 x 225 x 75 mm 10.25" x 8.86" x 2.95"
Environmental	90% humidity @ 50 deg C (122 deg F)
Operating Temperature Range	-30 to +60 deg C (-22 to +140 deg F)
Weight	4.09 kg 9 lb